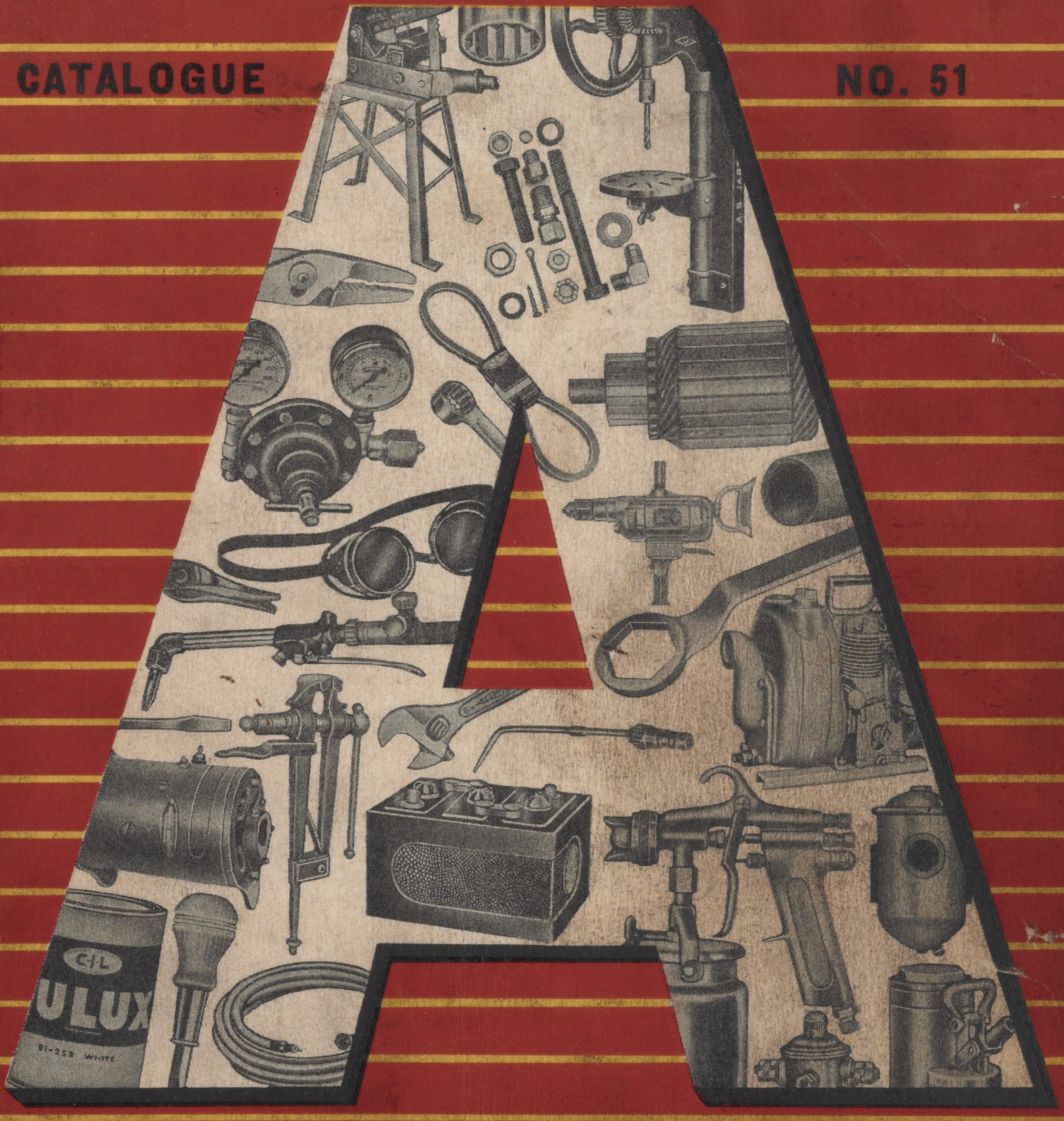
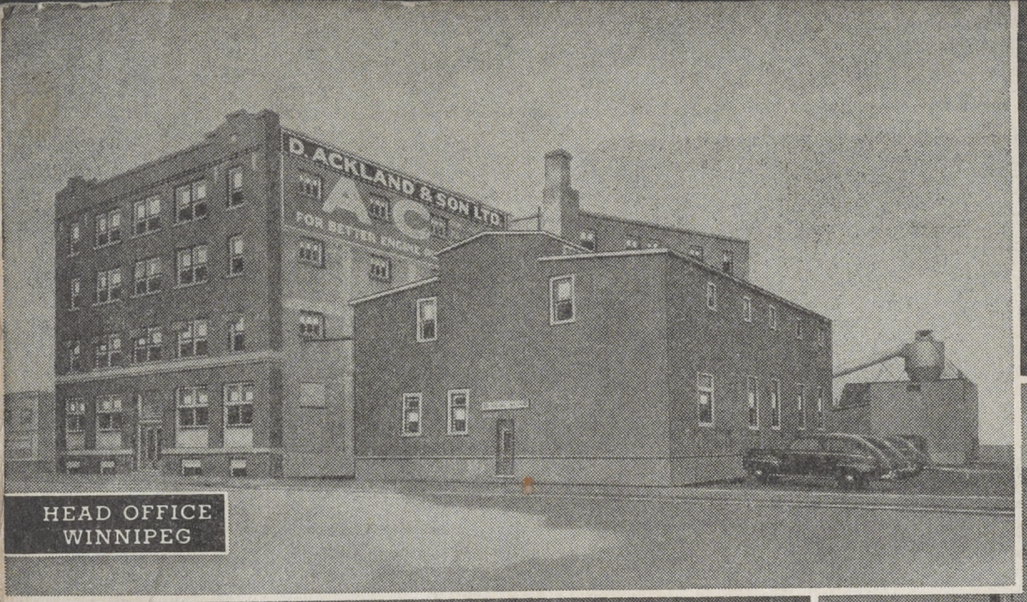
CATALOGUE NO. 51

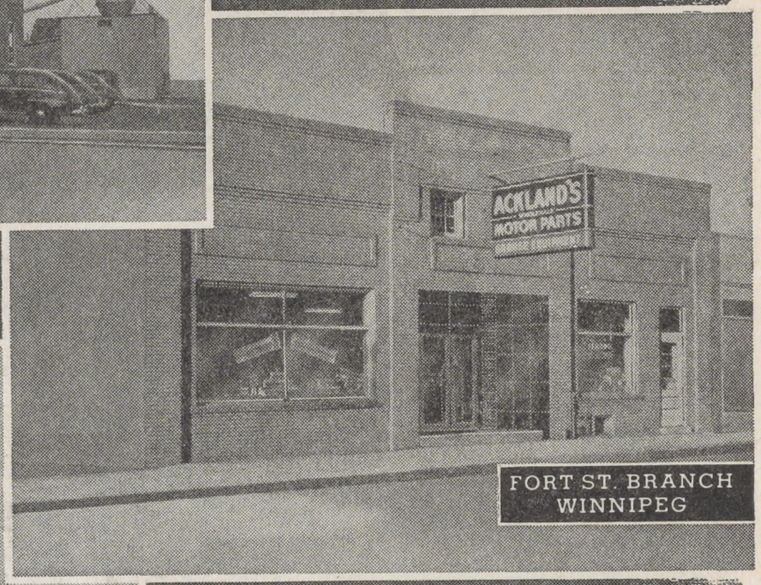


D. ACKLAND & SON. Limited

Head Office - WINNIPEG. *Branches* - DAUPHIN, BRANDON, CALGARY and EDMONTON



HEAD OFFICE
WINNIPEG



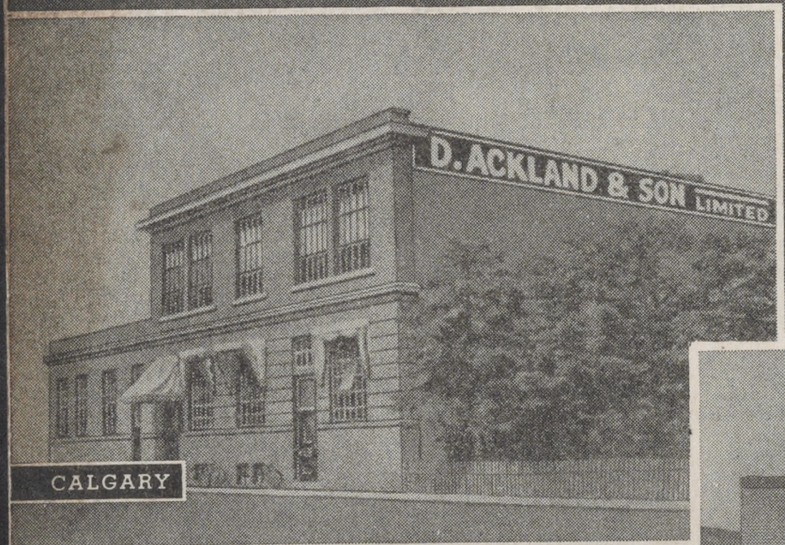
FORT ST. BRANCH
WINNIPEG



EDMONTON



BRANDON



CALGARY



DAUPHIN

SERVICE
DEPENDABILITY • FAIR DEALING

Our slogan is your guarantee of complete satisfaction. We stand solidly behind every item we sell.

Our policy is to sell strictly on a wholesale level to legitimate operators.

We realize that our prosperity depends upon the business success of you, our satisfied customer.

D. ACKLAND & SON Limited

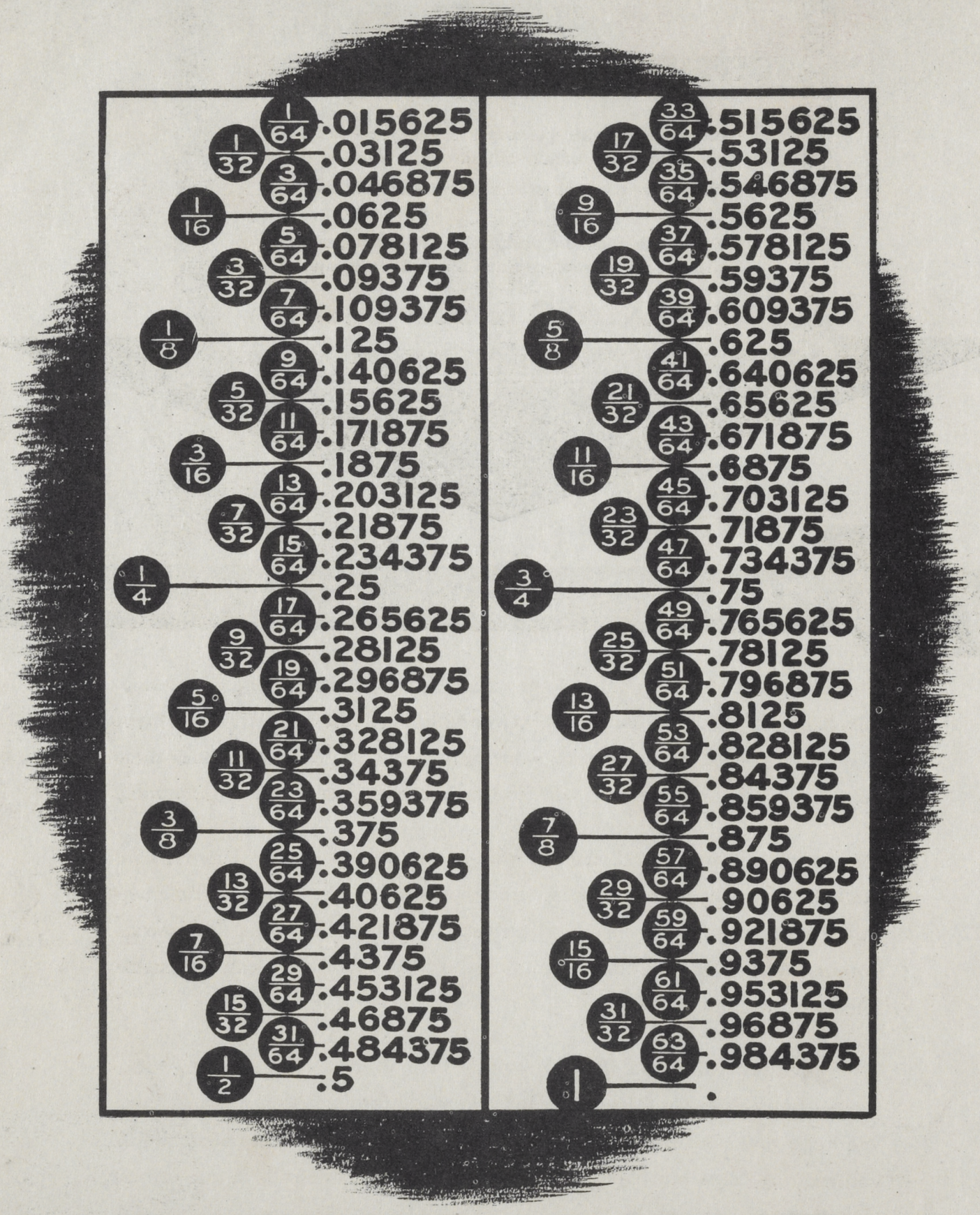
61 YEARS EXPERIENCE IN WESTERN CANADA

This long experience in catering to your needs has taught us many valuable lessons. We have learned what merchandise you need for your type of work . . . we know that you want only goods that are leaders in their field . . . you demand and will get the maximum value for your money.

Our branches and warehouses throughout the West are located and stocked to supply your demands quickly and fully. Our departments cover Automotive Supplies, Heavy Hardware, Welding Supplies, Hardwood Lumber and Wood Goods. This provides you with the widest possible selection of supplies.

With this new catalogue we want to say "Thank You" to our many thousands of customers and friends who have made the last 61 years a success. We hope that you will find on these pages those things you need. Should you require items not listed, please write to us and we will do our utmost to help you.

Your Convenient Conversion Table



D. ACKLAND and SON LTD.

CANADIAN INDUSTRIES C-I-L LIMITED

DULUX AND DUCO

Paint Shop

GO AFTER BUSINESS

Study your prospects. Refinishers have found it good business to go carefully into the problems of a prospect before attempting to sell their service. Nothing breeds confidence faster than when your prospect feels you fully understand his problems. When you approach him armed with facts, the job is half-sold.

* * * *

Use follow-up letters. Every time you call on a prospect, follow up with a letter. Thank him for his time. It's usually wise, if you have discussed a specific job with him, to summarize the facts again in a letter. Interviews are easily forgotten, but your letter usually is kept in your prospect's filing system for future reference.

* * * *

Write to prospects regularly. Several large refinishing shops regularly send out letters to a special prospect list. They keep tabs on those who respond, continue to pepper away at those who have yet to become customers. While a few refinishers have found circular letters a successful way to get business, most agree that business worth going after deserves more than a mere form letter. Each letter should refer specifically to the prospect, talk about the services you have to help HIM.

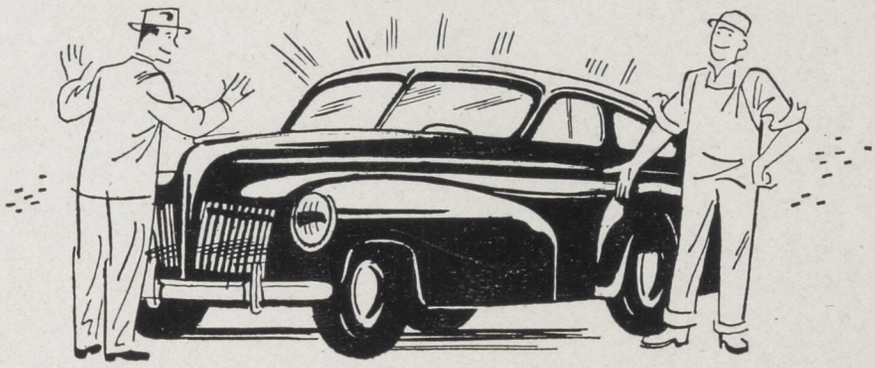
* * * *

Telephone Directory advertising is considered a good buy in the refinishing trade. List your name in the Yellow Pages or better still take a small display ad.



DucoDan

WHERE WEAR IS HARDEST DULUX SHOWS UP BEST



Practically any finish looks good when the car first rolls out of the paint shop. But how will it stand up to the daily grind of wear and weather?

Tough going brings out the superior qualities of DULUX. That's why DULUX is by far the favoured finish of the automotive industry . . . why so many fire and police departments, bus and truck operators and literally hundreds of thousands of motorists, keep cars looking showroom-new with DULUX . . . why hundreds of leading refinishers use and recommend it.

DULUX can TAKE IT!

DULUX combines lasting brilliance with outstanding durability. It defies rain and snow, blistering sun, traffic fumes, grease and oil. In the paint shop, DULUX saves time and cuts labour costs. It dries quickly with a high lustre that needs no rubbing or polishing.

★ ★ ★

50-PVA-5

Paint and Varnish Division, Halifax, Montreal, Toronto, Winnipeg, Regina, Calgary, Edmonton, Vancouver.

**DUCO and DULUX are registered trade names of Canadian Industries Limited.*

CANADIAN INDUSTRIES C-I-L LIMITED

Automotive Finishes

SERVING CANADIANS THROUGH CHEMISTRY

CANADIAN INDUSTRIES LIMITED • MONTREAL

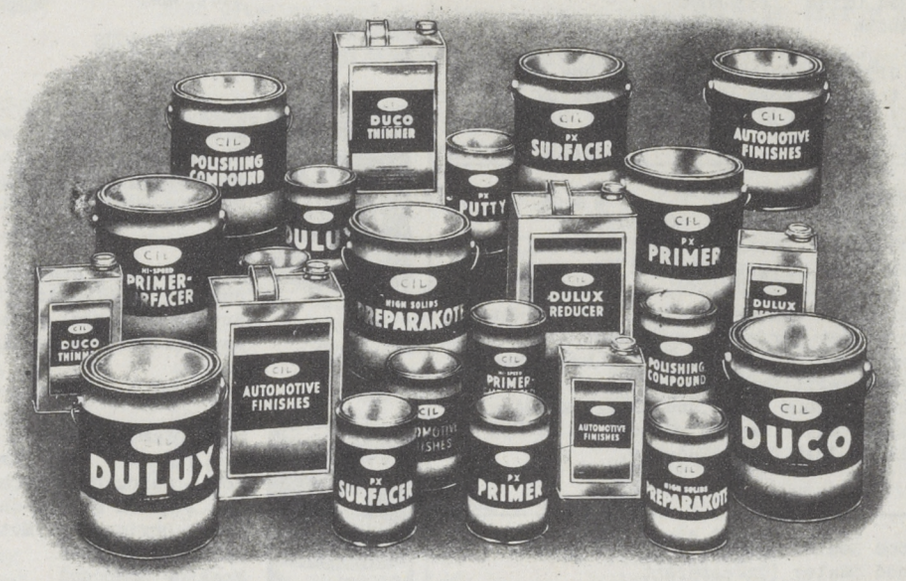
Automotive Finishes



CANADIAN INDUSTRIES C-I-L LIMITED



Standard Refinishing Materials of the Automotive Industry



Through long acceptance by the Canadian automobile manufacturers and the refinishing trade, C.I.L. products have become the standard materials of the automotive industry. Quality has always been C.I.L's. first consideration. Refinishers may use with confidence any products bearing the C.I.L. Oval trademark, because it stands for never-ending research, thorough testing, rigid control and constant care in manufacture.

All Prices listed are Net Prices



DUCO	GALLON	QUART
246 Line (except Black and Maroons)	$ 9.50	2.62
246 Line - Maroons	11.10	3.03
202 Line - Metallics (except Maroons)	9.50	2.62
202 Line - Metallic Maroons	11.10	3.03
260 Line - Metalli-Chrome	11.10	3.03
246-8708 - Truetone Black	7.70	2.18
Tinting (except Maroon)	7.45	2.11
Tinting - Maroon	11.10	3.03
Metallic Base 202-086	7.45	2.11
	½ pt.	¼ pt.
Striping Colours	1.10	.65

DUCO 246 Line - Non-metallic is the original automobile lacquer noted for quick drying, durability, and fine appearance when rubbed and polished.
DUCO 202 Line - Metallic colours are of the same material as the Duco 246 line but with the addition of finely divided aluminum.
DUCO Truetone Black 246-8708 is the truest black that can be produced. It has excellent gloss and colour retention. It can be rubbed and polished.



	GALLON	QUART
1913 CLEAR GLOSS LACQUER	$ 6.85	1.96

A clear gloss lacquer for use on mouldings and instrument panels. Apply by spray. Reduce if necessary with Duco Thinner.



DULUX	GALLON	QUART
93 Line - Group 1 (Standard Colours except Maroons and Reds)	$ 7.20	2.05
93 Line - Group 2 (Special Colours and Reds)	9.00	2.50
93 Line - Group 3 (Maroons and non-bleeding Reds)	11.00	3.00
181 Line - Metallics - Group 2 (All colours except Maroon)	9.00	2.50
	½ pt.	
Lettering and Striping: Colours	.85	
Maroon	1.00	
Aluminum (Ready-to-mix)		2.40
Clear		2.01
Aluminum Vehicle		1.78



PRIMERS	GALLON	QUART
PX Primer 233-1538	$6.10	1.78
PX Primer 233-81040	6.10	1.78
Blue Diamond Oxide Metal Primer UT-1155	4.65	1.41
Zinc Chromate Primer 2389	8.10	2.28

PX Primer 233-1538. A fast drying PX Primer for touch-up work on metal.
Blue Diamond Oxide Metal Primer. An oil-type rust inhibitive primer, excellent for all types of new or refinishing work if requirements permit an air drying time of 15 to 24 hours. It is supplied at spraying consistency but may be reduced up to 20% if desired.

C-I-L Automotive Finishes

All Prices listed are Net Prices



SURFACERS	GALLON	QUART
PX Surfacer 233-1035	$6.10	1.78

A quick drying Pyroxylin Surfacer intended for use over PX Primer or Blue Diamond Oxide Metal Primer when the finishing coat is to be Duco.



PRIMER SURFACERS		GALLON	QUART
Hi-Speed PX Primer Surfacer		$6.20	1.80
Grey	233-7886		
Red Oxide	233-8896		
White	233-1060		

A rapid drying combination Primer and Surfacer for all touch-up work where followed by Duco or Dulux.



HIGH SOLIDS			GALLON	QUART
"Preparakote"			$ 6.05	1.76
White	65-1050	Yellow 65-3475		
Grey	65-2424	Orange 65-2378		
Oxide	65-1052	Light Red 65-2374		

Supplied in six colours. Highest grade combination Primer Surfacer, excellent for practically all refinishing work. Preparakote fills irregularities in the surface. Can be dry sanded in four hours and water sanded after an overnight dry. May be reduced up to 25% with 3812 or 3819 Dulux Reducer.



SEALERS	GALLON	QUART
Dulux Wood Sealer (Clear)	$ 5.25	1.56
Dulux Wood Sealer (Transparent Blue)	5.25	1.56
Bleeder Seal		2.55

Dulux Wood Sealer (Clear). Intended for sealing porous surfaces such as wood and composition panels. One full coat should be applied, care being taken to brush well into board ends and open grain woods.
Bleeder Seal. A Sealer specially designed to prevent bleeding of reds and maroons when refinishing in white or light colours. Allow last coat to dry thirty minutes before applying surfacer or Preparakote. Bleeder Seal should not be sanded although it may be given a light scuffing to remove nibs.



THINNERS	42 gal Drum	12 gal Drum	5 gal Drum	Gal.	Qt.
3601 Duco Thinner	2.60	2.70	2.75	2.90	.98
3614 Duco Thinner	2.20	2.30	2.35	2.50	.88
3661 Thinner	1.95	2.05	2.10	2.25	.81
3608 Thinner	1.75	1.85	1.90	2.05	.80
3812 Dulux Reducer	1.55	1.65	1.70	1.85	.71
3818 Dulux Reducer			1.70	1.85	.71
3819 Dulux Reducer			1.75	1.90	.73
3942 Retarder				4.35	1.34



3601 Duco Thinner. Highest grade Duco Thinner for use in colour coats and mist coats.
3819 Dulux Reducer. A special slow drying reducer particularly suitable for use with Preparakote as it permits absorption of spray dust and ensures a smooth finish.

CLEANERS	GALLON	QUART
3980 Prep-Sol	4.45	1.36
3183 Cleaning Solution	2.00	
Metal Prep	5.45	1.61



3980 Prep-Sol - A safe solvent cleaner for reconditioning and cleaning old finishes. Removes wax, grease and traffic film.
METAL PREP is a metal cleaner and rust remover to be used on metal before applying primer. Reduce with 2 parts water to 1 part Metal Prep.



PUTTIES	5 Lbs.	3½ Lbs.	1 Lb.	Tubes
PX Putty 228-8004 Grey		1.94		1.17
PX Putty 228-5163 White		1.94		
Dulux Putty 1903 White	2.58		.62	
Dulux Putty 1900 Grey	2.58		.62	

For use over Preparakote to fill slight imperfections.

MISCELLANEOUS



	3 lb. cans	12 lb. cans
#10 Fine Polishing Compound	1.25	4.15
#7 Rubbing & Polishing Compound	1.20	3.95
#2 Rubbing & Polishing Compound	1.10	3.55
Machine Rubbing & Polishing Compound	1.20	3.95

No. 7 Rubbing and Polishing Compound. A fast cutting rubbing and polishing compound. Supplied in semi-paste form. Reduce with water to creamy consistency.



	GALLON	QUART
Blue Diamond Paint & Varnish Remover	3.50	1.13
No. 1 Quick Drying Chassis Black	3.45	1.11
No. 2 Quick Drying Chassis Black	2.85	.96
Quick Drying Grey Motor Enamel	5.25	1.56
Tack Rag Varnish	3.45	1.11
Masking Compound	6.45	1.86
Paper Paint Strainers 2.60 per 100		



BLUE DIAMOND PAINT & VARNISH REMOVER - A strong effective remover for stripping off the old finish. Contains wax and benzol.
MASKING COMPOUND - A preparation for masking windows, chrome, etc. Can be removed readily after the finish is dry by washing with a sponge or soft brush and water.



REFRIGERATOR FINISHES	GALLON	QUART
Duco Refrigerator White 236-1011	10.75	2.94
Dulux Refrigerator White 91-253	9.85	2.71

DUCO Refrigerator White 236-1011 - A special white Duco for refrigerators. Made to match the colour of white Dulux used by most Refrigerator manufacturers. Not for outside exposure.
DULUX Refrigerator White 91-253 - A porcelain white, drying with a sheen resembling a baked finish.



FURNITURE FINISHES	GALLON	QUART
Clear Duco 1806	4.75	1.44
Satin Lacquer 1882	4.25	1.31
Duco Sealer 1963	4.45	1.36

Clear DUCO 1806 - A clear gloss finish for wooden furniture. Apply by spray as received. May be rubbed and polished.
Satin Lacquer 1882 - A medium sheet satin lacquer designed to give a rubbed effect without rubbing. Apply by spray as received.
DUCO Sealer 1963 - A sanding sealer for use on wooden furniture possessing good build and durability. It may be sanded after 30 minutes dry. however, one hour is preferable. Apply by spray as received. If desired it may be reduced with up to 25% DUCO Thinner. When refinishing old furniture, the old finish can be easily removed with C.I.L. Paint and Varnish Remover, by doing so this will ensure a much higher finish.

YOU CAN BE SURE WITH PROVEN PRODUCTS.

C-I-L COLOR ADVISORY SERVICE REVIEW





C-I-L FINISHES



We are pleased to list C.I.L's. Colour Advisory Service Review, covering colours used by General Motors, Chrysler and Ford during the years 1946, 47, 48, 49 and 1950. This service will enable you to get an exact match for any touch-up work. Also listed is information on Commercial colours used by these manufacturers. When ordering touch-up material please state, MAKE AND YEAR OF CAR, PAINT JOB NUMBER AND COLOUR NAME.

"PAINT JOB NUMBERS ARE SHOWN ON PLATE BACK OF DASH UNDER HOOD"

GENERAL MOTORS OF CANADA LIMITED

Passenger Colours

PAINT Job No.	COLOUR NAME	"DULUX" Sales No.	"DUCO" Sales No.
640	Black	93-86	246-8708
641	Royal Blue	93-6171	246-80171
642	Martial Maroon	93-6170	246-80170
643	Gunmetal Grey	93-6168	246-80168
644	Brewster Green	93-6169	246-80169
646	Seafoam Green	93-6172	246-80172
647	Indra Blue	93-6156	246-8982
648	Dove Grey	93-6173	246-80173
700	Black	93-86	246-8708
701	Oxford Blue	93-6174	246-80174
702	Royal Maroon	93-6175	246-80175
703	Deepstone Grey	93-6178	246-80178
704	Deepwater Green	93-6176	246-80176
705	Hollywood Beige	93-6181	246-80181
706	Canterbury Green	93-6180	246-80180
707	Airway Blue	93-6179	246-80179
708	Sky Grey	93-6177	246-80177
709	Sky Grey No.2	93-6182	246-80182
720 (Upper)	Sky Grey	93-6177	246-80177
(Lower)	Deepstone Grey	93-7168	246-80178
721 (Upper)	Deepwater Green	93-6176	246-80176
(Lower)	Canterbury Green	93-6180	246-80180
722 (Upper)	Royal Maroon	93-6175	246-80175
(Lower)	Hollywood Beige	93-6181	246-80181
723 (Upper)	Sky Grey No.2	93-6182	246-80182
(Lower)	Deepstone Grey	93-6178	246-80178
724 (Upper)	Deepstone Grey	93-6178	246-80178
(Lower)	Sky Grey No.2	93-6182	246-80182
800	Black	93-86	246-8708
801	Navy Blue	93-6184	246-80184
802	Mikado Maroon	93-6185	246-80185
803	Hilltop Grey	93-6187	246-80187
804	Wedgewood Green	93-6183	246-80183
806	Valley Green	93-6188	246-80188
809	Highway Grey	93-6186	246-80186
815	Bonaventure Green	93-6189	246-80189
817	Beechnut Brown	93-6191	246-80191
818	Blue Bell Blue Metallic	181-7558	202-80214
820 (Upper)	Wedgewood Green	93-6183	246-80183
(Lower)	Valley Green	93-6188	246-81088
821 (Upper)	Hilltop Grey	93-6187	246-80187
(Lower)	Highway Grey	93-6186	246-80186
900	Black	93-86	246-8708
901	Navy Blue	93-6184	246-80184
902	Wiltshire Maroon	93-6195	246-80195
903	Hilltop Grey	93-6187	246-80187
904	Wedgewood Green	93-6183	246-80183
906	Seafoam Green	93-6172	246-80172
907	Paisley Blue	93-6197	246-80197
908	Avon Blue	93-6196	246-80196
909	Highway Grey	93-6186	246-80186
915	Bangor Green Metallic	181-7566	202-80430
916	Grenville Grey Metallic	181-7567	202-80431
917	Windsor Grey Metallic	181-7568	202-80432
920 (Upper)	Wedgewood Green	93-6183	246-80183
(Lower)	Seafoam Green	93-6172	246-80172
921 (Upper)	Hilltop Grey	93-6187	246-80187
(Lower)	Highway Grey	93-6186	246-80186

FORD MOTOR CO. OF CANADA LTD.

Passenger Colours

PAINT Job No.	COLOUR NAME	"DULUX" Sales No.	"DUCO" Sales No.
20	Black	93-86	246-8708
30	Biscay Blue Metallic	93-7559	202-80215
31	Berwick Green Metallic	93-7560	202-80216
32	Colony Blue	93-6090	246-81090
33	Canyon Blue	93-6091	246-81091
34	Birch Grey	93-6092	246-81092
35	Seamist Green	93-6088	246-81088
36	Midland Maroon Metallic	93-7561	202-80229
37	Meadow Green	93-6089	246-81089
38	Palisade Green	93-6606	246-80606
39	Forest Green	93-6609	246-80609
40	Alpine Blue Metallic	181-7589	202-80477
41	Sheridan Blue (Colony)	93-6090	246-81090
42	Dover Grey	93-6602	246-80602
43	Mirado Yellow	93-6610	246-80610
44	Sportsman Green	93-6603	246-80603
45	Bimini Blue Metallic	181-7586	202-80474
46	Cambridge Maroon Met.	181-7587	202-80475
47	Maywood Green Metallic	181-7588	202-80476
48	Matador Red Metallic	181-7582	202-80478
50 (Upper)	Birch Grey	93-6092	246-81092
(Lower)	Canyon Blue	93-6091	246-81091
51 (Upper)	Canyon Blue	93-6091	246-81091
(Lower)	Colony Blue	93-6090	246-81090
52 (Upper)	Birch Grey	93-6092	246-81092
(Lower)	Meadow Green	93-6089	246-81089
53 (Upper)	Seamist Green	93-6088	246-81088
(Lower)	Meadow Green	93-6089	246-81089
54 (Upper)	Dune Beige	93-6605	246-80605
(Lower	Penrod Tan	93-6601	246-80601
55 (Upper)	Dover Grey	93-6606	246-80602
(Lower)	Forest Green	93-6606	246-80609
56 (Upper)	Palisade Green	93-6602	246-80609
M-1722	Vermillion Red	93-6010	246-8533
M-1724	Black	93-86	246-8708
M-1800	Yosemite Green	93-6055	246-8846
M-3982	Navy Blue	93-6073	246-81073
M-3983	Botsford Blue Green	93-6075	246-81075
M-3989	Dynamic Maroon	93-6076	246-81076
M-3990	Greenfield Green	93-6077	246-81077
M-3991	Dark Slate Grey Metallic	93-7551	202-81078
M-3992	Silver Sand Metallic	93-7552	202-81079
M-14220	Rotunda Grey	93-6083	246-81083
MC-14221	Barcelona Blue	93-6080	246-81080
M-14222	Monsoon Maroon	93-6085	246-81085
M-14225	Blue Grey Metallic	93-7556	202-80206
M-14226	Parrot Green Metallic	93-7555	202-80204
M-14243	Forest Grey	93-8796	No Match
M-14264	Biscay Blue Metallic	93-7559	202-80215
M-14268	Berwick Green Metallic	93-7560	202-80216
M-14282	Seamist Green	93-6088	202-80229
M-14283	Meadow Green	93-6089	246-81089
M-14284	Canyon Blue	93-6091	246-81091
M-14285	Colony Blue	93-6090	246-81090
M-14286	Birch Grey	93-6092	246-81092
M-28255	Calvert Blue	93-31	246-80155

D. ACKLAND & SON, Limited
Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

C-I-L COLOR ADVISORY SERVICE REVIEW

CHRYSLER CORPORATION OF CANADA

PAINT Job No.	COLOUR NAME	"DULUX" Sales No.	"DUCO" Sales No.
4001	Black	93-86	246-8708
4002	Tuxedo Blue	93-6308	246-80308
4003	Regal Blue	93-6305	246-80305
4004	Airway Blue	93-6307	246-80307
4005	Crown Maroon	93-6306	246-80306
4006	Frontenac Green	93-6309	246-80309
4007	Cairo Sand	93-6301	246-80301
4008	Gull Grey	93-6300	246-80300
4012	Marine Blue	93-6312	246-80312
4017	Crown Maroon	93-6314	246-80314
4020	Riviere Mist	93-6316	246-80316
4021	Bermuda Beige	93-6315	246-80315
4032	Equador Blue	93-6307	246-80317
4033	Hamilton Green	93-6318	246-80318
4035	Plymouth Gunmetal	93-6320	246-80320
4100	New Brunswick Blue	93-6322	246-80322
4102	Air Cruiser Maroon	93-6323	246-80323
4103	Monterey Blue	93-6324	246-80324
4104	Opal Grey	93-6321	246-80321
4105	Black	93-86	246-8708
4106	Tropic Moss	93-6326	246-80326
4107	Gunmetal	93-6325	246-80325
4109	Trinidad Brown	93-6327	246-80327
4119	Tropic Moss	93-6326	246-80326
4120	Opal Grey	93-6321	246-80321
4121	Gunmetal	93-6325	246-80325
4122	Tropic Moss	93-6326	246-80326
4123	Trinidad Brown	93-6327	246-80327
4125	Opal Grey	93-6321	246-80321
4126	Gunmetal	93-6325	246-80325
4127	Tunis Blue Metallic	181-7578	202-80467
4128	Gypsy Green Metallic	181-7577	202-80466
4150	Black	93-86	246-8708
4151	Marine Blue	93-6312	246-80312
4152	Monterey Blue	93-6324	246-80324
4153	Air Cruiser Maroon	93-6323	246-80323
4154	Opal Grey	93-6321	246-80321
4155	Gunmetal	93-6325	246-80325
4156	Tropic Moss	93-6326	246-80326
4157	Battalion Beige	93-6328	246-80328
4158	Tunis Blue Metallic	181-7578	No Match
4159	Gypsy Green Metallic	181-7577	202-80466

STUDEBAKER CORPORATION OF CANADA

PAINT Job No.	COLOUR NAME	"DULUX" Sales No.	"DUCO" Sales No.
P-2212C	Holiday Red	93-6286	246-80286
P-2213B	Velvet Black	93-86	246-8708
P-2214C	Alleghany Grey	93-6283	246-80283
P-2218C	Plaza Grey	93-6297	246-80297
P-2219C	Willow Green	93-6292	246-80292
P-2159C	Boulevard Grey	93-6295	246-80285
P-2164C	Iroquois Blue	93-6282	246-80282
P-2169C	Black	93-86	246-8708
P-2179C	Allegheny Grey Light	93-6283	246-80283
P-2222C	Midnight Blue	93-6294	246-80294
P-2223C	Glacier Green	93-6295	246-80295
P-2224C	Concord Blue	93-6296	246-80296
P-2241C	Melody Blue	93-6280	246-80280
P-2258C	Falcon Grey	93-6502	246-80502
P-2259C	Black	93-86	246-8708
P-2261C	Plaza Grey	93-6297	246-80297
P-2263C	Concord Blue	93-6296	246-80296
P-2264C	Midnight Blue	93-6294	246-80294
P-2268C	Aqua Green	93-6503	246-80503
P-2269C	Grove Green	93-6501	246-80501
P-2270C	Comanche Red	93-6505	246-80505
P-2277C	Fiesta Tan	93-6506	246-80506
W-0I 7791	Sagamore Green Dark		246-35983
W-0J 7796	Desert Tan Light		246-35981
W-0K 7801	Desert Tan Dark		246-35982
W-0L 7806	Nassau Blue		246-35989
W-PX 7947	Berkshire Grey Light		246-35978
W-PY 7948	Berkshire Grey Dark		246-35979
W-RD 7963	Sagamore Green Light		246-35984
W-RF 7969	Smoky Mountain Grey Dark		246-25985
W-RG 7973	Smoky Mountain Grey Light		246-35986
W-RF 7969	Allegheny Grey Dark		246-35985
W-RH 7978	Sierra Red		246-35988
W-SC 8041	Navaho Tan Light		246-30330
W-SD 8042	Navaho Tan Dark		246-30340
W-SE 8043	Holiday Red		246-30350
W-SF 8044	Osage Blue		246-30360
W-SG 8045	Shenandoah Green Dark		246-30380
W-SH 8046	Shenandoah Green Light		246-30370
W-SM 8075	Coronado Grey		246-30390
W-SN 8079	Oxford Grey		246-30400
W-ST 8107	Coronado Grey No.2		246-32670

Commercial Colours

GENERAL MOTORS

PAINT Job No.	COLOUR NAME	"DULUX" Sales No.	"DUCO" Sales No.
30	Commercial Blue	93-300	246-8194
31	Commercial Red	93-236	246-8528
32	Commercial Green	93-230	246-8379
33	Commercial Maroon	93-356	246-8534
34	Oshawa Blue	93-6101	246-8188
35	Commercial Cream	93-294	246-6308
36	Black	93-86	246-8708
630	Commercial Blue	93-300	246-8194
631	Commercial Red	93-236	246-8528
632	Commercial Green	93-230	246-8379
633	Commercial Maroon	93-356	246-8534
634	Oshaws Blue	93-6101	246-8188
635	Commercial Cream	93-294	246-6308
636	Black	93-86	246-8708
730	Commercial Blue	93-300	246-8194
731	Commercial Red	93-236	246-8528
732	Commercial Green	93-230	246-8379
733	Commercial Maroon	93-356	246-8534
734	Oshawa Blue	93-6101	246-8188
735	Commercial Cream	93-294	246-6308
736	Black	93-86	246-8708
830	Commercial Blue	93-300	246-8194
831	Commercial Red	93-236	246-8528
832	Commercial Green	93-230	246-8379
833	Commercial Maroon	93-356	246-8534
834	Oshawa Blue	93-6101	246-8188
835	Commercial Cream	93-294	246-6308
836	Black	93-86	246-8708
930	Commercial Blue	93-300	246-8194
931	Commercial Red	93-236	246-8528
932	Commercial Green	93-230	246-8379
933	Commercial Maroon	93-356	246-8534
934	Oshawa Blue	93-6101	246-8188
935	Commercial Cream	93-294	246-6308

STUDEBAKER

PAINT Job No.	COLOUR NAME	"DULUX" Sales No.	"DUCO" Sales No.
P-2243C	Midnight Blue	93-6294	246-80294
P-2248C	Cherokee Red	93-6275	246-80275
P-2249C	Chrome Yellow	93-6291	246-80291
P-2278C	Fiesta Tan	93-6506	246-80506

CHRYSLER

PAINT Job No.	COLOUR NAME	"DULUX" Sales No.	"DUCO" Sales No.
3506	Black	93-86	246-8708
3507	Commercial Red	93-246	246-8528
3508	Regal Maroon	93-248	246-8633
3509	Commercial Blue	93-8097	246-8847
3510	Thistle Green	93-8098	246-8848
3511	Silverwing Grey	93-8099	246-8849
3600	Black	93-86	246-8708
3601	Commercial Red	93-246	246-8528
3602	Commercial Blue	93-8097	246-8847
3603	Thistle Green	93-8098	246-8848
3604	Silverwing Grey	93-8099	246-8849
3605	Commercial Maroon	93-8866	246-80424
3700	Black	93-86	246-8708
3701	Commercial Red	93-236	246-8528
3703	Commercial Blue	93-8097	246-8847
3704	Thistle Green	93-8098	246-8848

FORD

PAINT Job No	COLOUR NAME	"DULUX" Sales No.	"DUCO" Sales No.
21-91	Vermillion	93-6010	246-8533
22-92	Yosemite Green	93-6055	246-8846
96	Palisade Green	93-6606	246-80606
97	Colony Blue	93-6090	246-81090
98	Dover Grey	93-6602	246-80602

DO NOT HESITATE TO ASK FOR ANY INFORMATION YOU NEED.

"DUREX"

COATED ABRASIVE PAPER AND CLOTH PRODUCTS

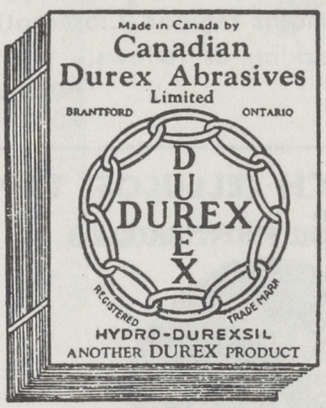
SCOTCH MASKING TAPE—SCOTCH CELLULOSE TAPE

BRAND BRAND

NET PRICES TO REPAINT SHOPS (FEDERAL SALES TAX INCLUDED)

"HYDRO DUREXSIL" WATERPROOF PAPER

Sheets 9" x 11"



Silicon Carbide Abrasive Paper for Wet Rubbing Lacquers, Enamels and Undercoats. Made in 3 weights: A, C and D. A is the lightest, D the heaviest. A is made in grits 220 to 600 inclusive, C 150 to 320 inclusive and D 100 to 120 inclusive.

Grit No.	Per Sheet	Per Doz. Sheets	Per Quire 24 Sheets	Per Ream 480 Sheets Assorted	Per Ream 5 Reams and Over Quantities 2400 Sheets Assorted
600-180	$ 0.13	$ 1.20	$ 2.00	$32.99	$31.73
150C	.14	1.28	2.13	35.19	33.84
120D	.14	1.37	2.27	37.39	35.96
100D	.16	1.58	2.63	43.44	41.77

SCOTCH MASKING TAPE BRAND

72 Yard Rolls

SCOTCH Brand Masking Tape does what you have wanted masking tape to do. A thin, strong, clean edge. Instantly adhesive. Thinners cannot penetrate its backing. Can be used repeatedly. Leaves no stain or residue.

Width	1 Roll Per Roll	12 Rolls Per Roll	36 Rolls Per Roll	144 Rolls Per Roll
½"	$1.34	$1.20	$1.14	$1.03
¾"	1.66	1.50	1.42	1.28
1"	2.04	1.84	1.74	1.58
1½"	3.07	2.76	2.61	2.37
2"	4.09	3.68	3.47	3.15

NOTE: Special widths can be made to order at special prices. Widths may be assorted to make up quantities.

PACKING

½" — 2 Rolls per Box — 72 Rolls per Carton
¾" — 1 Roll per Box — 36 Rolls per Carton
1" — 1 Roll per Box — 36 Rolls per Carton
1½" — 1 Roll per Box — 18 Rolls per Carton
2" — 1 Roll per Box — 18 Rolls per Carton

"DUREXITE" COMBINATION FIBRE DISCS

For Portable Sanding Machines

These discs are accurately made, uniformly coated and give a clean, smooth finish. Will quickly sand down any metal parts both flat or curved. Will remove old paint or rust.

7" Diameter — ½" or ⅞" Centre Hole

Grit No.	Small Orders	25 to 99	100 to 299	300 or Over (Assorted)
120	$0.28 Each	$0.25 Each	$0.23 Each	$0.20 Each
80	.28	.25	.23	.20
50	.32	.28	.26	.23
36	.34	.30	.28	.24
24	.35	.31	.28	.25
16	.45	.39	.37	.32

9" Diameter — ½" or ⅞" Centre Hole

Grit No.	Small Orders	25 to 99	100 to 299	300 or Over (Assorted)
120	$0.38 Each	$0.33 Each	$0.31 Each	$0.27 Each
80	.38	.33	.31	.27
50	.42	.37	.35	.30
36	.45	.40	.37	.32
24	.46	.41	.38	.33
16	.59	.52	.49	.43

Packing as follows:—

No. 120 — 50 Discs per Box
80 and 50— 40 Discs per Box
36 — 30 Discs per Box
24 — 20 Discs per Box
16 — 10 Discs per Box

"DUREXITE" RESIN FIBRE DISCS

Are used for both wet and dry sanding. They are used wet where dust, overheating or loading is a problem. Will do 2 to 3 times the work of ordinary discs.

7" Diameter — ½" or ⅞" Centre Hole

Grit No.	Small Orders	25 to 99	100 to 299	300 or Over (Assorted)
80	$0.38 Each	$0.33 Each	$0.31 Each	$0.27 Each
50	.42	.37	.35	.30
36	.45	.40	.37	.33
24	.46	.41	.38	.33
16	.59	.52	.49	.43

9" Diameter — ½" or ⅞" Centre Hole

Grit No.	Small Orders	25 to 99	100 to 299	300 or Over (Assorted)
80	$0.50 Each	$0.44 Each	$0.41 Each	$0.36 Each
50	.56	.50	.46	.41
36	.60	.53	.50	.43
24	.61	.54	.51	.44
16	.79	.70	.65	.57

Packing — Same as Combination Fibre Discs.

"DUREX"

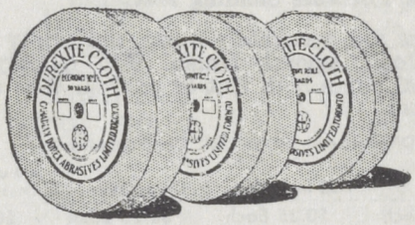
COATED ABRASIVE PAPER AND CLOTH PRODUCTS

SCOTCH BRAND MASKING TAPE—SCOTCH BRAND CELLULOSE TAPE

NET PRICES TO REPAINT SHOPS (FEDERAL SALES TAX INCLUDED)

"DUREXITE" CLOTH ECONOMY ROLLS

50 Yard Rolls



For general shop work, in rolls 1", 1½" and 2" wide. Snugly wound on spools. Operator cuts off as required.

	Small Orders Per Roll			12 Rolls Per Roll (Assorted)		
	Widths			Widths		
Grit No.	1"	1½"	2"	1"	1½"	2"
320 to 100	$2.88	$4.03	$5.12	$2.70	$3.77	$4.79
80	2.98	4.18	5.37	2.79	3.91	5.03
60	3.23	4.47	5.77	3.02	4.19	5.40
50	3.38	4.77	6.11	3.16	4.47	5.72
40	3.58	5.07	6.51	3.35	4.75	6.10
36	3.83	5.42	6.96	3.58	5.07	6.51

"DUREXITE" CLOTH HANDY ROLLS

10 Yard Rolls

For general shop work, in rolls 1", 1½" and 2" wide. Snugly wound on spools. Operator cuts off as required.

Grits No. — 180, 120, 100, 80, 60, 50

Small Orders Per Roll			12 to 23 Rolls Per Roll			24 Rolls or Over Per Roll (Assorted)		
Widths			Widths			Widths		
1"	1½"	2"	1"	1½"	2"	1"	1½"	2"
$0.85	$1.16	$1.48	$0.80	$1.09	$1.39	$0.74	$1.02	$1.30

"DUREXITE" CLOTH

Sheets 9" x 11"

Aluminum Oxide Abrasive for use in the machine shop. It is superior to emery and because of its hardness and toughness it not only does a better and faster job, but shows longer life.

Grit No.	Per Sheets	Per Doz. Sheets	Per Quire (24 Sheets)	Per Ream (480 Sheets) Assorted
320 to 100	$ 0.13	$ 1.39	$ 2.78	$48.59
80	.13	1.47	2.95	51.61
60	.15	1.60	3.20	56.05
50	.16	1.72	3.43	60.05

"DUREXITE" COMBINATION FIBRE DISCS OPENCOAT

Made in 16 and 24 grits only.
Price same as regular (Closecoat).
Packing as follows:—

No. 24 ..... 30 Discs per box
No. 16 ..... 20 Discs per box

SCOTCH CELLULOSE TAPE BRAND FOR FROST SHIELDS



Fully Transparent — Seals Without Water
Rolls 1" x 10 Yards — 12 Rolls per Box
Consumer Price — 50c per Roll

Garage —
6 doz. Rolls ..... $3.60 per doz.
1 doz. Rolls ..... 4.00 per doz.

SCOTCH CELLULOSE TAPE BRAND (TRANSPARENT)

	Small Orders Per Roll	6 Rolls Per Roll	48 Rolls Per Roll	144 Rolls Per Roll
½" x 2592 Inches	$1.43	$1.29	$1.14	$1.00
¾" x 2592 Inches	1.78	1.60	1.42	1.24
1" x 2592 Inches	2.36	2.12	1.89	1.65

	Small Orders Per Roll	6 Rolls Per Roll	48 Rolls Per Roll	144 Rolls Per Roll
½" x 1296 Inches	$0.84	$0.75	$0.67	$0.58
¾" x 1296 Inches	1.00	.90	.80	.70

HEAVY DUTY DISPENSERS FOR SCOTCH CELLULOSE TAPE BRAND 2592 INCH ROLLS

Small Orders $1.96 each — **6 Dispensers $1.77 each**

DESK DISPENSERS FOR SCOTCH CELLULOSE TAPE BRAND 1296 INCH ROLLS

Small Orders $1.40 each — **6 Dispensers $1.26 each**

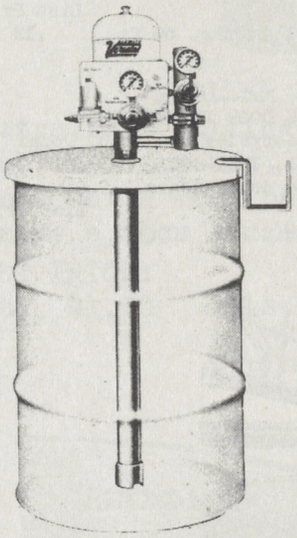
EVERY ORDER IS A RUSH ORDER WITH US.

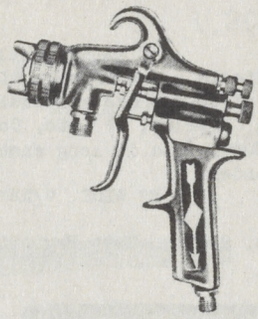
"DUREX"

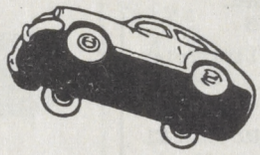
UNDERSEAL

Rubberized

PROTECTIVE COATING







See equipment section for further details on Undercoating Guns.

PROTECTS AGAINST

RUST — By protecting vulnerable underbody areas with a tough, thick "rubberized hide" that's positive insurance against moisture.

CORROSION — Seals the underbody and fenders against the destructive action of road salts and chemicals.

RATTLES and **SQUEAKS** — By completely sound deadening fenders, underbody and hood, keeps bolts and joints tight.

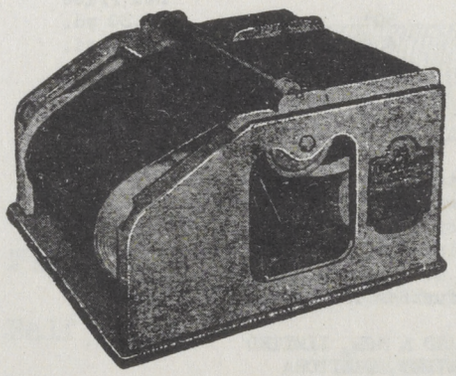
DUST, HEAT, COLD, FUMES — UNDERSEAL coats the underbody of your car with a film unaffected by heat or cold, completely seals all cracks and crevices.

DEALER NET PRICES (Sales Tax Included)

1 to 4 Drums (44 Imperial Gallons)	$1.87 gal.
5 to 14 Drums (44 Imperial Gallons)	1.77 gal.
15 Drums and over (44 Imperial Gallons)	1.67 gal.

F.O.B. Winnipeg, Man.

(Carrying Charges Extra)



APRON TAPER MACHINE

For use in masking cars when using UNDERSEAL and for spray painting.

NET PRICE — *(Sales Tax Included)*

12" Width Machine $23.27

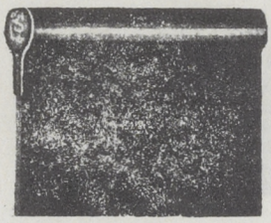
MASKING PAPER (Sales Tax Included)

1150 Feet 12" Wide . . . . . $2.33 per roll

D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

TRIMMING SUPPLIES



PLAIN FENDER WELT
Made of Pyroxylin-coated drill.
1 1/2" wide, 3/16" cord.
STANDARD FOR ALL CARS.

		List Price
No. 8100	25 yards to roll	.24 yd.

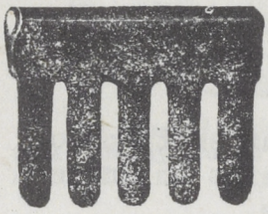
2" wide, 1/4" cord.
HEAVY DUTY FOR TRUCKS AND BUSSES

		List Price
No. 8103	25 yards to roll	.24 yd.

FLEXIBLE-CHROMED BEAD FENDER WELT.
This is a fender welt with flexible, rustproof, chromed bead to replace all equipment bright bead fender welts on Chrysler, De Soto, Dodge and Plymouth 1940-48. The 100" length is long enough to replace equipment on any fender.

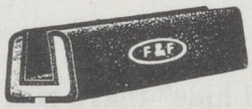
2" WIDE, 7/32" BEAD, 100" PER LENGTH.

		List Price
No. 8102	Unit Pkg. 100" length	2.20 ea.



COMB FENDER WELT
Made of Pyroxlin-coated drill.
Provides for fender-to-body bolts wherever they occur, also takes curves without kinks.
1 1/2" wide, 3/16" cord.
STANDARD FOR ALL CARS.

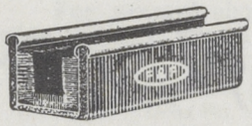
		List Price
No. 8108	25 yards to roll	.24 yd.



FELT-COVERED RUBBER GLASS RUN CHANNEL
Especially recommended for insyallation on wood bodies when glass moves between 2 parallel runs.

Height	Width at Base	Gap
1/2"	9/16"	1/4"

		List Price
No. 4350	Unit Pkg. 50 ft.	.18 ft.



BRIGHT BEAD CHANNEL
FEATURES

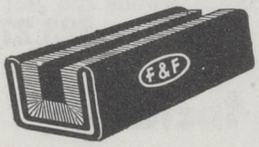
Bead: The Bead is of stainless steel.

Bending: Curve gradually so as to allow bead to slide on edge of side walls; otherwise the bead might snap off.

Core: The core is of plated steel of slotted construction. The outer wass The outer walls are parallel.

Lining: The bottom lining is of carpet for smooth operation of the glass. The two side linings are of heavy non-piling felt to ensure permanent 7/32" gap.

		List Price
No. 4478	8 ft. long	2.60 ea.



FLEXIBLE BLACK BEAD CHANNELS
4448 is lined with heavy felt on bottom and sides. Parallel walls will not spread open, they are lined with non-piling felt ensuring a permanent 7/32" gap. These two features eliminate the most common cause of window rattling. No special need be taken in bending to desired shape.

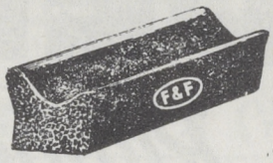
		List Price
No. 4448	8 ft. long	2.38 ea.



GLASS SETTING CHANNEL

Height	Width at Base	Inside Base
7/16"	31/64"	1/4"

		List Price
No. 4513	Unit Pkg. 50 ft.	.11 ft.



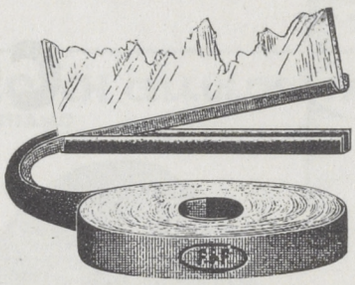
DOOR WEATHERSTRIP
Ideal for, Buick, Cadillac, Chevrolet, Chrysler, De Soto, Dodge, Ford, La-Salle, Mercury, Monarch, Oldsmobile, Nash, Plymouth, Pontiac 1940-49.

		List Price
No. 4675	Unit pkg. 50 ft.	.13 ft.



TRUNK DOOR WEATHERSTRIP
For use on Chrysler, De Soto, Dodge and Plymouth. 1941-49.
2 door and 4 door sedans.

		List Price
No. 4705	Unit Pkg. 50 ft.	.21 ft.

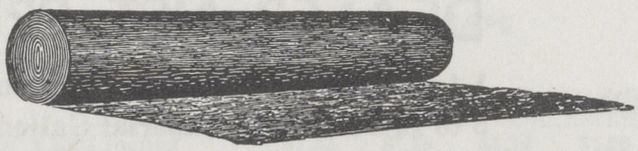


FLAT STRIPPINGS
CORKTAPE
The most widely used glass setting material is made from a mixture of rubber and ground cork bound to a cotton backing.

			List Price
No. 4573	1/16" x 1 1/4"	100 ft. rolls	2.00 Roll
No. 4574	1/16" x 1 1/2"	100 ft. rolls	2.20 Roll

EVERSEAL
Is a patented uncured rubber stripping reinforced with cotton fibre which permits the setting of glass by mere hand pressure

			List Price
No. 4603	1/16" x 1 1/4"	75 ft. rolls	1.50 Roll
No. 4604	1/16" x 1 1/2"	75 ft. rolls	1.75 Roll



DOUBLE TEXTURE TOPPING MATERIAL
Standard black finish, white back, long wearing material. Will make your car look like new.

	Net Price
50"	2.30 yd.
65"	3.45 yd.

CRYSTAL AND PLATE GLASS

We are in a position to service your needs for Crystal and Plate glass windows. When ordering please state, MAKE, YEAR and MODEL of your car or truck. It is also important to advise the location for which the glass is needed, such as "right front door" "left rear door" etc. For further information on prices etc. please contact

D. ACKLAND & SON, LIMITED
WINNIPEG, MANITOBA

or our nearest branch office.

REFINISHING SUPPLIES



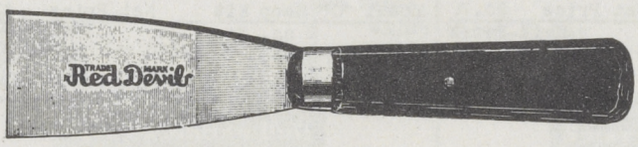
McALEER SPEEDIE-RUB

Extra fast cutting, easy working, hand rubbing compound. Can't be beaten on jobs which must be done at a "price" and leave a nice profit.

NET PRICE:

Qts. $1.00 Gals. $3.00 5 Gals. $10.00

Putty Knives



No.	Size		Net Price
P1	3"	superflex	1.50
P1	3"	flexible	1.10
P1	1½"	Flexible	.39



One pound of continuous skein Bull Dog Steel Wool per package.

Grades	Net Price
2--1--0	.37 lb.
00	.47 lb.

Files



PANSAR BODY FILES

		Net Price
Flat		3.50 ea.
	Dozen Lots	3.15 ea.
Half Round		3.50 ea.
	Dozen Lots	3.15 ea.

Paint Brushes

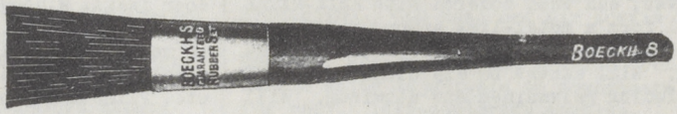
The ideal brushes to use for automotive painting and refinishing jobs.

OX HAIR SIGN WRITERS

Size	Retail Price
1/4	1.20

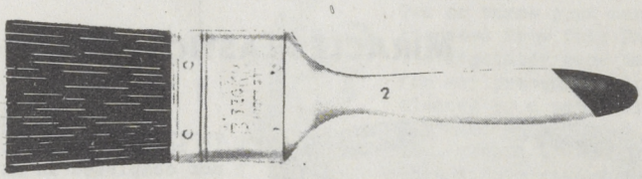
CAMEL HAIR SWORD STRIPERS

Size	Retail Price
1	.25



OVAL SASH TOOLS

Size	Length Out	Retail Price
4	1 13/16"	.50
6	2"	.80



Model "ARGO"

Size	Length Out	Retail Price
1	1 3/4"	.15
1 1/2	1 13/16"	.25
2	1 13/16"	.35
2 1/2	2"	.50
3	2"	.75
3 1/2	2 1/4"	1.25

Model 10 "COMET"

Size	Length Out	Retail Price
1	2"	.60
1 1/2	2 1/4"	.90
2	2 1/4"	1.15
2 1/2	2 1/4"	1.50
3	2 1/2"	2.00

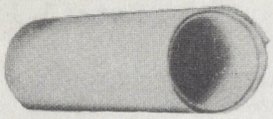
Model 213 "FAVOURITE

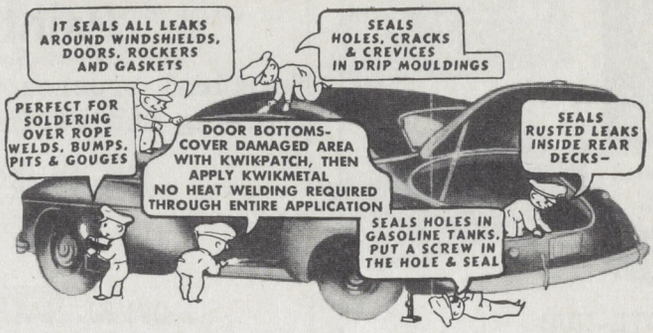
Size	Length Out	Retail Price
1	2 7/16"	1.25
1 1/2	2 15/16"	2.25
2	3 1/8"	3.50
2 1/2	3 1/8"	4.50
3	3 3/8"	6.00
3 1/2	3 5/8"	8.50

KWIK-PATCH
A PERMANENT FABRIC PATCH

KWIK METAL
A PERMANENT METAL FILLER

KWICK-PATCH







KWIK-PATCH
Is a substitute for metal in fabric form, will harden like metal into any shape, adheres to any metal, wood, leather or canvas, and when covered with KWIK-METAL will form a metal-like armor. Water-proof and rustproof. No heat or flame necessary. Will adhere to any clean metal including galvanized and aluminum. Will not rust or mildew

Stock No.	Unit Sizes	Net Price
R-2 Regular	10 sq. ft.	$10.50

Model "A" Shop Kit	Net Price $17.70
10 sq ft.	Kwik-Patch
3 lbs.	Kwik-Metal
128 ozs	Kwik-Solv

KWIK-METAL
The all purpose permanent filler forms a heavy, smooth, metallic plate surface over KWIK-PATCH. Is ideal for filling gouges door leaks, windows, roofs, gas tanks, plus thousands of other items. Adheres to metal, wood, plastics, porcelain, plaster, glass, paints, paper, fabrics, etc. Pliable as paste. Waterproof and rustproof. No heat. No. flame.

Stock No.	Unit Sizes	Net Price
K-1	3 lbs.	$3.60
K-2	1½ "	$1.95

Model "B" Shop Kit.	Net Price $5.78
4 sq. ft	Kwik-Patch
½ lb.	Kwik-Metal
16 ozs.	Kwik-Solv

KWIK-SOLV
Is a high test solvent for both patch and filler. For preparing KWIK-PATCH, for smoothing and thinning KWIK-METAL at time of application, and wetting down and degreasing metal surfaces before applying KWIK-PATCH or KWIK-METAL. Solvent may be used to thin KWIK-METAL if necessary.

Stock No.	Unit Sizes	Net Price
S-1 Red	128 Ozs.	$3.90
S-2 Red	16 Ozs.	.85

Model "C" Shop Kit	Net Price $3.40
2 sq. ft.	Kwik-Patch
½ lb.	Kwik-Metal
8 ozs.	Kwik-Solv

SPEED MASK

MIRACLE PLASTIC TAPE



TRANSLUCENT
It is translucent..if job is not completed in one day, vision thru windows is clear enough so that vehicle can be moved.

ECONOMICAL-22 CARS PER GAL.
One gallon of Speed Mask is sufficient for completely masking approximately 22 cars.

WILL NOT AFFECT PAINT
May be applied over regulation paint, lacquer, and enamel finishes.

WATERPROOF
It can be used along with wet-sending, it is not permeated by water or wet paint. Masked cars can be moved outside in rain. Will not blow off under air pressure.

SPEED MASK - PLASTIC TAPE

Stock No.	Unit Size	Net Price
M-1	128 oz. can	$8.50
M-2	32 oz. can	$2.50
M-3	16 oz. can	$1.40

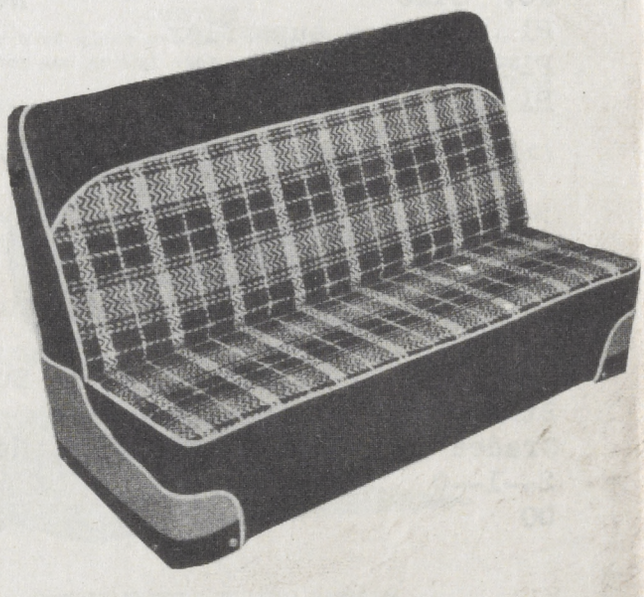


SPEED SOLV
Clean brushes with Speed solv, to avoid contamination. Use only Speed solv for thinning, no other solvent will work effectively.

SPEED SOLV

Stock No.	Unit Size	Net Price
P	16 ozs.	.90

SEAT COVERS



We carry a complete stock of Standard and Universal type Seat Covers, which will fit most models. However, in some cases these have to be "Made to Measure", so be sure and state, MAKE, YEAR, and MODEL of your automobile when ordering. These are available in all the popular shades, made of good-wearing materials, such as, Gabardine, Wool Plaid, Moleskin etc. Seat Covers are a "MUST" for any car, not only do they protect your seats, but they add to the general appearance. Do not hesitate to write for samples of shades and materials. For further information as to types and prices, please contact,

D. ACKLAND & SON LTD.
Winnipeg, Manitoba.

or our nearest BRANCH OFFICE.
"DO NOT FORGET" state, YEAR, MAKE and MODEL of your car when ordering.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

COMPLETE SPRAY PAINTING EQUIPMENT

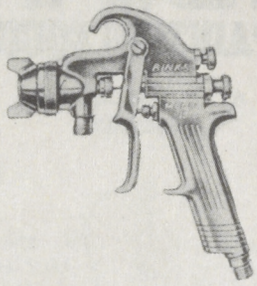
BINKS MODEL 18 SPRAY GUN



All controls are at back of gun. Gun body drop forged aluminum with black electrolytic coating. Gun head and air nozzle drop forged bronze, heavily plated. Material nozzle hardened steel. Steel needle valve adjustable to compensate for wear. Hose connections standard pipe thread. Air hose connection ¼" Material hose connection 3/8". Recommended siphon nozzle set-up for use with lacquers and synthetic enamels.
66x66SD-11.6 C.F.M. at 50 lbs. pressure.
66x66SA-8.1 C.F.M. at 50 lbs. pressure.

	Net Price
Model 18 Gun	41.80
Model 18 Gun for Stipple or Spatter	41.80
Model 18 Gun for Veiling.	46.75

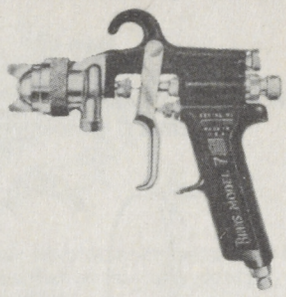
BINKS MODEL 19 SPRAY GUN



A lightweight sturdy production Spray Gun All controls are at back of gun. Spray pattern adjustable from round to flat. Air Nozzle bronze. Fluid nozzle special hardened steel. Gun body aluminum. All other parts made of wear resisting materials. Needle Valve adjustable. Self-centering nozzles. Recommended siphon nozzle set-up for use with lacquers and synthetic enamels.
66x66SD-11.6 C.F.M. at 50 lbs. pressure
66x66SA-8.1 C.F.M. at 50 lbs. pressure.

	Net Price
Model 19 Gun	38.50
Model 19 Gun for Stipple or Spatter	38.50
Model 19 Gun for Veiling	43.45

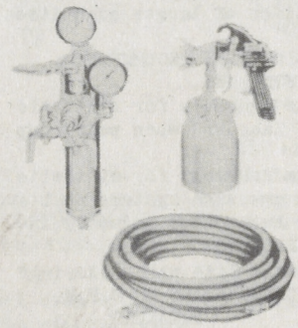
BINKS MODEL 7 SPRAY GUN



All controls are at back or gun. Spray pattern adjustable from round to flat. Gun body drop forged aluminum with black electrolytic coating for surface protection. Gun head and air nozzle drop forged bronze, chromium plated. Material nozzle hardened steel. Steel needle valve adjustable to compensate for wear. Self-centering nozzles. All other gun parts made of wear-resisting materials.
36x36SD-11.5 C.F.M. at 50 lbs. pressure.
35x35SC-8.0 C.F.M. at 50 lbs. pressure.

	Net price
Model 7 Gun	41.80
Model 7 Gun for Stipple or Spatter	41.80
Model 7 Gun for veiling	46.75

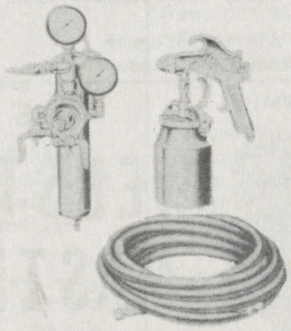
Binks Model S-513 Spray Painting Unit



Designed for Automotive and other refinishing. Will spray all standard materials. Nozzles recommended.
66x66SA-8.1 C.F.M. at 50 lbs. pressure.
66x66SD-11.6 C.F.M. at 50 lbs. pressure.
Consists of the following:
1-Model 18 Spray Gun
1-Model 81-500 Qt. Siphon Cup
1-25' length H-105 Air Hose with connections.
1-Model 538-A Extractor

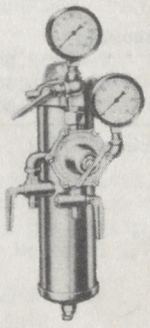
Net Price: $102.80

Binks Model S-518 Spray Painting Unit



Will do a similiar job as Model S-513 except it has the lighterweight Spray Gun Model 19, as shown above.
66x66SA-8.1 C.F.M. at 50 lbs. pressure
66x66SD-11.6 C.F.M. at 50 lbs. pressure
Consists of the following
1-Model 19 Spray Gun
1-Model 81-500 Qt. Siphon Cup
1-25' length H-105 Air Hose with connections.
1-Model 538-A Extractor.

Net Price: $99.50

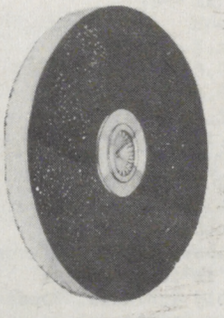


Model 538A Extractor. Will handle 35 C.F.M. Two or three guns can be operated from this Unit. The Regulator cane be set for any pressure. Air is cleaned by a metal filter 1/2" (F) pipe thread inlet. Two 1/4" (M) pipe thread regulated pressure outlets, and one 1/4" (M) main line pressure outlet.
Net Price: $45.10



BINKS SIPHON CUPS

One Quart Clamp Type Siphon Cups. For use on 18,7,9,16 and 19 Spray Guns. 81-500 Cup Complete 3/8" Thread.
Net Price: $7.37



NET PRICE $18.75

Sandy Daptor

Uses **ORDINARY SANDPAPER**

on your own disc grinder!

"MAGIC CLUTCH ACTION" . . . . . SANDPAPER SPEED REGULATED BY PRESSURE AGAINST METAL . . . . THE SANDPAPER SLIPS.

LEAVES METAL SMOOTHER . . . NO SWIRLS . . . REQUIRES LESS PRIMER SURFACER.

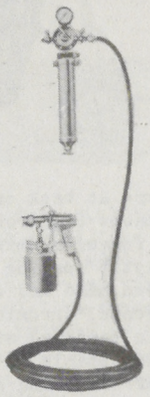
"FEATHER-EDGES" — SCUFFS — REMOVES LETTERS AND PAINT — SMOOTHS METAL *20 TIMES FASTER.*

D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

WEBSTER
SPRAY PAINTING EQUIPMENT

MODEL "FRA" AIRLINE ASSEMBLY



The Air Transformer is more than 20" over-all and is equipped to handle an additional gun if required, combines oil and moisture separator and pressure regulator and pressure gauge.

Net Price Complete	$59.50

Outfit consists of;
Model "A" Production Gun with either A4, A6, or A8 nozzle
Complete with cup and cup assembly $32.50

25 ft. standard Air Hose	8.00
Model FR. Air Transformer	19.00

MODEL 700 AIRLINE ASSEMBLY



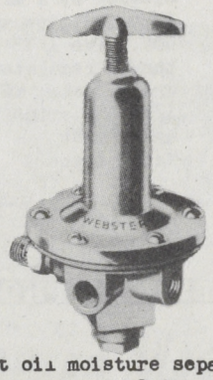
This efficient assembly is capable of performing work that formerly required much more expensice equipment. Ideal for spraying fenders, wheels, and all jobs where a fine finish is required.

Net Price Complete	$39.75

Outfit consists of;
Model 107 Spray Gun complete with Cup. $20.00

Model 499 Air Transformer	11.75
25 ft. standard Air Hose	8.00

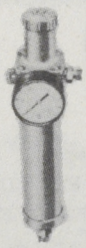
MODEL "K" PRESSURE REGULATOR



An efficient oil moisture separator, combining pressure regulator, and pressure gauge.

Net Price Complete	$11.75
No. 400 Regulating Valve only	6.00
No. 150 Airline Filter	3.00
Pressure Gauge	3.00

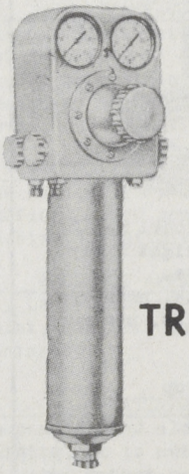
MODEL No. 499 AIR TRANSFORMER



This Regulator is recommended when accuracy and steadfast performance are required. Copper diaphragm, nickle plated body. All threads are standard 1/4" pipe thread.

Net Price Valve only.	$11.75

Model WMT



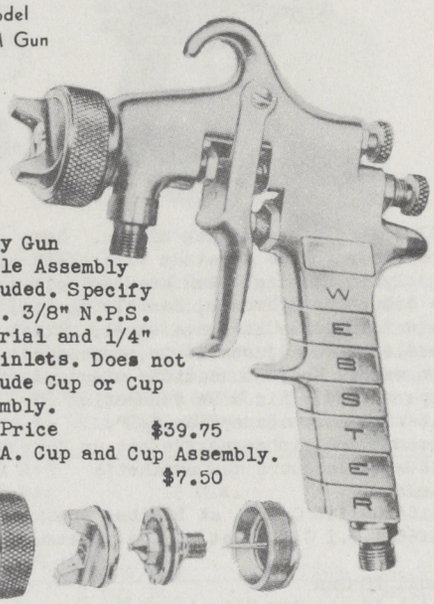
THE WEBSTER MASTER AIR TRANSFORMER

Net Price; $54.50

THE
WEBSTER MASTER
AIR TRANSFORMER AND AIRLINE ASSEMBLY

Especially designed for Automotive and equipment finishing. Provides sufficient clean dry air for two production type Spray Guns. Incorporates an entirely new Pressure Regulator; a twin dial instrument panel that completely incases the working parts, one gauge showing the main line pressure and the other--regulated pressure. Outlets are provided for two Spray Guns. The New Master Air Transformer has a much greater air capacity and guarantees a more constant, uniform air pressure. After setting the pressure you require, it remains constant. This is the ideal Transformer to use with the New Webster Master Production Gun--Model WM

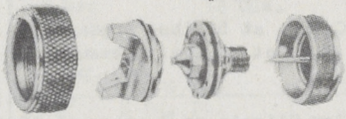
Model
WM Gun



Spray Gun
Nozzle Assembly included. Specify size. 3/8" N.P.S. Material and 1/4" air inlets. Does not include Cup or Cup assembly.

Net Price	$39.75

WM-CA. Cup and Cup Assembly. $7.50



BALL AND SOCKET PRINCIPLE
Wide range of Nozzle Combinations.
A nozzle combination for every type of liquid. This Gun may be used with Paint Cup, or with a Pressure Paint Tank for the application of larger quantities of materials
NOZZLE COMBINATIONS RECOMMENDED.
INDUSTRIAL FINISHES.
WM-20 Nozzle Assembly for synthetic enamels and lacquers when paint cup is used.
WM-30 Nozzle Assembly for synthetic enamels for pressure systems such as used by the Automotive Industry in Production Painting.
"Specify Nozzle Size when ordering"
NOZZLE AIR CONSUMPTION IN C.F.M.

NOZZLE	PRESSURE		
	40 lbs.	50 lbs.	60 lbs.
WM20	6.1	7.4	8.7
WM-30	7.7	9.4	11.1

MODEL A PRODUCTION GUN

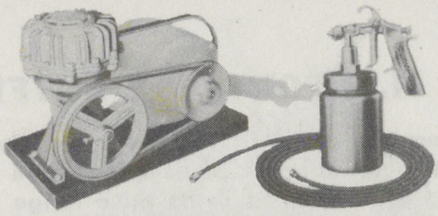


Model "A" Spray Gun is made in 3 nozzle capacities, A-4, A-6 and A-8. It's self-centering nozzle assembly assures at all times a proper atomization and a sharp even fan spray. A special control feature enables the fan to be instantly widened or narrowed while the gun is in operation
Spray Gun-Nozzle Assembly included. Does not include Cup or Cup assembly.

Net Price:	$26.50
A-CA-Cup and Cup cover Assembly	6.00

WEBSTER
SPRAY PAINTING EQUIPMENT

AN ALL-ROUND DEPENDABLE OUTFIT



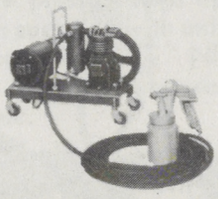
MODEL NO. 860 List Price without Motor $32.50

Handles all ordinary finishing materials and applies them evenly and efficiently on rough or smooth surfaces at amazing speed.

OUTFIT consists of Compressor mounted on steel base, cadmium plated handle, rubber feet, drive pulley for motor, "V" belt, 25 ft. No. 1000 Air Hose and Model No. 112 Spray Gun with round and fan nozzles.

	List Price
Model No. 850 Complete with 1/4 H.P. 60 Cycle Motor	$54.20
Model No. 845 Compressor. On base with "V" Belt and drive pulley.	20.50
Model No. 840 Compressor only	18.00
Model No. 112 Spray Gun	10.00
No. 1000--25 ft. Air Hose with fittings.	2.50

WEBSTER MODEL "S" PORTABLE



Will handle heavy paints and enamels without thinning and applies them to any surface quickly and evenly without waste.

PAINTS rough surfaces as well and easily as smooth ones.

Outfit consists of Model "Q" Compressor, single cylinder, 2" bore, 1 3/4" stroke, displacement 2 1/2 cu. ft. per minute at 700 R.P.M. Model "S" Spray Gun and 25 ft. Standard Air Hose with fittings.

	List Price
Complete with 1/3 H.P. 60 Cycle Motor	$117.75
Complete without Motor	92.90
Motor-Compressor only.	96.25
Model "S" Spray Gun with Cup	15.00
25 ft. Standard Air Hose with fittings	8.00

WEBSTER MODEL "TG" PORTABLE

Same specifications as Model S outfit but equipped with Gasoline Motor instead of Electric Motor.

	List Price
Complete with Gasoline 5/8 H.P. Motor	$187.00
COMPLETE WITHOUT GASOLINE MOTOR	138.50
Motor Compressor Unit only	122.00

AIR AND PAINT HOSE

HOSE PRICES WITH CONNECTIONS

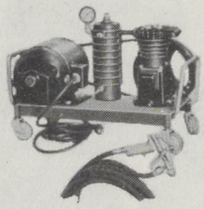
Standard	Air Hose	Paint Hose	No. 1000	List Price Air Hose	List Price Paint Hose
10 ft. length	3.50	5.00	10 ft. length	1.00	3.50
15 ft. length	5.00	7.25	25 ft. length	2.50	8.75
25 ft. length	8.00	11.75	50 ft. length	5.00	17.50
50 ft. length	15.50	23.00			

Webster Standard Air Hose is 3 ply re-inforced fabric construction with a smooth rubber inside surface 5/16" in diameter. All connections are permanently clamped in at the factory and are standard 1/4" threads.

Webster Special Air Hose No. 1000 is for light duty and is sold for use on Models Nos. 860, 700, and 800.

Webster Standard Paint Hose is made from paint-resisting rubber reinforced with 3 ply fabric and is 3/8" inside diameter. Connections are standard pipe threads, but 3/8" is used at the gun to prevent interchange of paint and air.

WEBSTER MODEL "R" PORTABLE



Model "R" is recommended for maintenance painting in factories. hospitals etc. Extremely portable one man outfit, covers large areas with amazing speed.

Outfit consists of 1/3 or 1/2 H.P. Electric Motor-Compressor Unit--with Model "R" Compressor, 2 1/2" bore and 1 3/4" stroke, displacement 3 cu. ft. per minute at 650 R.P.M. Model S Spray Gun, 50 ft. standard 5/16 Air Hose, 10 ft. Standard 5/16 Air Hose, 10 ft. standard Paint Hose, and 2 gallon Paint Tank.

	List Price
Complete with 1/2 H.P. 60 Cycle Motor	$207.40
Complete WITHOUT MOTOR	159.88
Model S Spray Gun	15.00
50 ft. Standard 5/16" Air Hose with fittings	15.50
10 ft. Standard 5/16" Air Hose with fittings	3.50
10 ft. Standard Paint Hose with fittings	5.00
Model LT 2 Gallon Paint without Regulator	35.00

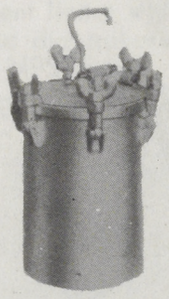
WEBSTER MODEL "RG" PORTABLE

Same Outfit as Model "R"---except for Gasoline Motor in place of Electric Motor and outfit is mounted on larger, heavier base. Motor is 1 1/2 H.P. Briggs and Stratton 4 cycle air cooled.

The Gasoline Motor makes it possible to use Model "RG" on construction jobs, barn painting, bridges etc. anywhere where electric power is not easily available.

	List Price
Complete with Gasoline Motor, 1 1/2 H.P. Briggs and Stratton.	$229.88
Complete WITHOUT GASOLINE MOTOR	161.88
Motor-Compressor unit only	162.38

PAINT TANKS



Webster Paint Tanks are heavily galvanized, inside and out, to stand many years of service. Latches are self-centering and cover has air release cock, paint shut-off tap and safety valve.

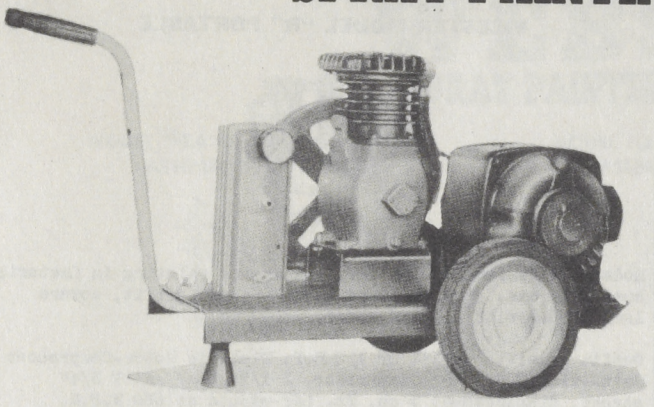
	List Price
2 Gallon Model LT. without regulator	$35.00
5 Gallon Model LT-5 without regulator	55.00

If you have a painting job to do--large or small--you will find these Webster Spray Painting Outfits a wonderfully easy, efficient and economical way to do the work.

For further particulars on any Webster Outfits or parts which are not listed, Kindly contact:

D. ACKLAND & SON LTD.

SPRAY PAINTING EQUIPMENT Cont'd



Model V-2-60

A 1 H.P. PORTABLE OUTFIT

We recommend this Unit for the Professional who requires an outfit capable of covering large areas at high speed. Unequalled in its price range for barn work, factory maintenance, hospitals, hotels, institutions. Applies uniform finish with house paints, mill paints and all other paints used for large area work.

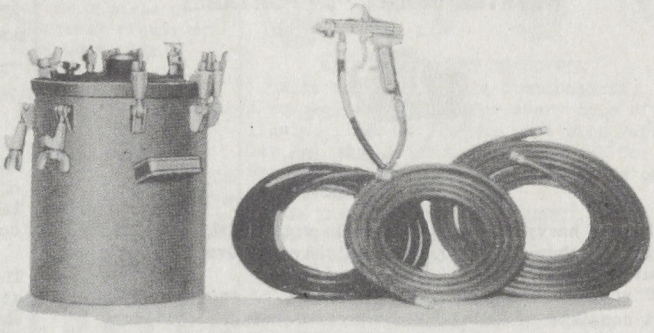
COMPRESSOR SPECIFICATIONS—Model M Compressor, twin cylinder, bore 2½", stroke 2", flywheel 12". 7.41 CFM displacement. Working pressure, 60 pounds.

GUN SPECIFICATIONS—Model AIB Spray Gun, pressure feed, for the application of paint on large wall surfaces, on construction work and maintenance jobs in the factory and on the farm. New improved pressure feed internal atomization nozzle. Eliminates the necessity of a regulator on the paint tank. ¼" NPS air inlet, ⅜" NPS paint outlet.

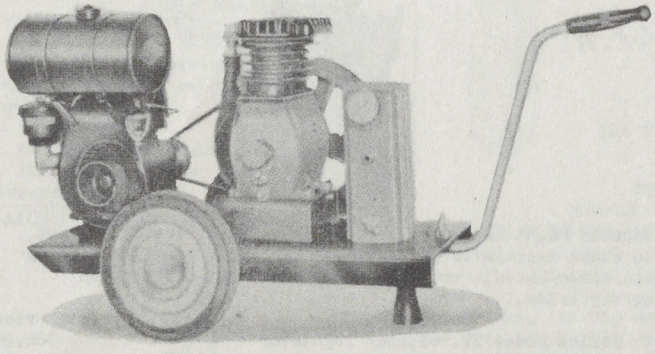
PAINT TANK—5 gallon LT with quick air release. Self-centering lugs. ¼" air inlet and outlet, ⅜" paint outlet.

AIR HOSE—1 ply heavy red rubber air hose with smooth finish to avoid hose picking up paint and dirt. Branded for your protection. ¼" NPS thread.

PAINT HOSE—1 ply heavy black rubber paint hose with solvent resistant liner. Smooth outside finish for resisting paint adhesion. ⅜" NPS thread fittings.



Gun, Hose and Tank Assembly



Model V-2-G

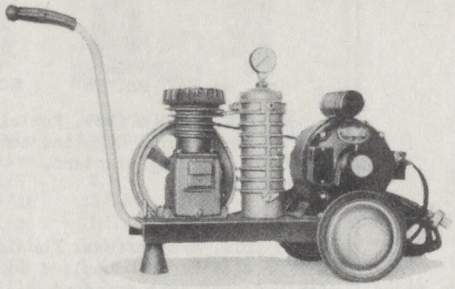
MOTOR COMPRESSOR ASSEMBLY — 1 H.P. Motor and Model M Compressor mounted on heavy steel plate base with unifin cooling, Pulse Chamber (new design), Pressure Gauge, Blow-off Valve and Drain Cock. Exceptionally portable with 10" rubber-tired wheels and rubber-tipped rear foot for three point rubber suspension to eliminate vibration. Handy removable cart type handle with rubber grip.

MOTOR SPECIFICATIONS — 1 H.P., 110/220 Volt, Single Phase, 25 or 60 Cycle.

GAS ENGINE SPECIFICATIONS—1.8 H.P., 4 cycle, air cooled Briggs & Stratton.

Model V-60	Portable Unit C/W 60 cycle motor	$388.90
Model V-G	Portable Unit C/W Gasoline Engine	388.90
Model V-L	Portable Unit LESS MOTOR	308.90
Model V-2-60	Motor Compressor Unit C/W 60 cycle motor	279.50
Model V-2-G	Motor Compressor Unit C/W Gasoline Engine	279.50

SPRAY PAINTING EQUIPMENT Cont'd



Model J-2-60

A ½-H.P. PORTABLE OUTFIT

Capable of covering large areas with amazing speed, in the factory, hospitals, hotels, office buildings, and on the farm.

COMPRESSOR SPECIFICATIONS—Model R Compressor, single cylinder, bore 2½", stroke 1¾", 12" flywheel, 3.38 CFM displacement. Working pressure, 60 lbs.

GUN SPECIFICATIONS—Model S Gun, internal atomization for low pressure feed operation with Paint Cup or Tank. Cup supplied with unit, 1 quart capacity. ⅜" NPS thread paint inlet, ¼" NPS thread air inlet. Gun handles all types of house paints, enamels, varnishes, stains, etc.

PAINT TANK—2-gallon LT with convenient ladder hook, self-centering lugs, heavily galvanized. ¼" NPS air inlet and outlets, ⅜" NPS paint outlet.

AIR HOSE—1 ply heavy red rubber air hose with smooth finish to resist paint and dirt pickup. Branded for your protection. ¼" NPS thread.

PAINT HOSE—1 ply heavy black rubber paint hose with solvent resistant lining with smooth exterior finish to resist dirt and paint adhesion.

Model J-60	C/W 60 Cycle Motor	$212.40
Model J-G	C/W Gasoline Motor	222.40

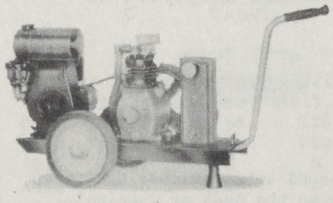
A ¾-H.P. PORTABLE OUTFIT

Similiar in design to J-60. Has 3/4 H.P. motor and better spray equipment.

Equally as fast for the Plant Maintenance Man due to its exceptional portability and low cost operating factor. A Model 107 external break-up type gun may also be used with this unit when combined with a regulated Paint Tank.

COMPRESSOR SPECIFICATIONS—Model H Compressor, twin cylinder, bore 2", stroke 2", 12" flywheel, 4.73 CFM displacement.

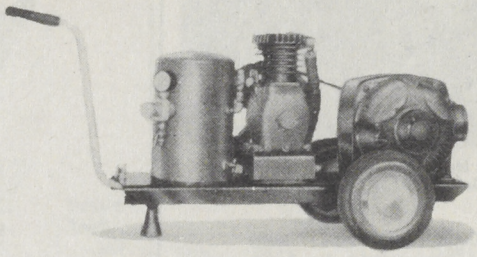
Model L-60	C/W 60 Cycle Motor	$309.90
Model LG	C/W Gasoline Motor	309.90



Model L-2-G

MODEL L - 2 - G

Illustrated is the type of Gasoline Engine available with these 3 outfits



Model VS-2-60

AN ALL AROUND UNIT

For the house painter, factory maintenance man or for institutional work. This powerful unit designed for economical operation and large area coverage is of dual purpose. Provided with regulated AIR STORAGE, it is equipped with an A-6 Production Gun of the external break-up type. Ideal for handling lacquers, enamels and other quick-drying finishes for maintenance work. Can be used with house paints, mill paints and other type finishes.

COMPRESSOR SPECIFICATIONS — Model M Compressor, twin cylinder, bore 2½", stroke 2", flywheel 12". 7.41 CFM displacement. Working pressure, 90 pounds.

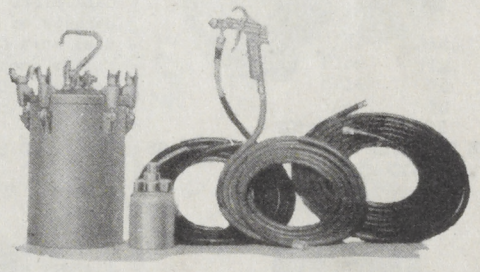
GUN SPECIFICATIONS—Model A-6 Production Gun. Self-centering nozzle assembly of the external break-up type. Special fan control allows the fan to be widened or narrowed instantly. ¼" NPS air inlet and ⅜" NPS paint inlet.

PAINT TANK—5-gallon LR Paint Tank equipped with No. 400 regulator, gauge, self-centering latches, air release cock, paint shut-off tap and safety valve. ¼" NPS air inlet and outlet, and ⅜" NPS paint outlet.

AIR HOSE—1 ply heavy red rubber air hose with smooth finish to avoid paint and dirt pickup. Branded for your protection. ¼" NPS thread.

PAINT HOSE—1 ply heavy black rubber paint hose with solvent resistant lining with smooth exterior finish to resist paint and dirt adhesion. Branded for your protection. ⅜" NPS thread.

Model VS-60	C/W 60 Cycle Motor	$449.90
Model VS-G	C/W Gasoline Motor	494.90



Gun, Hose and Tank Assembly

Illustrated is the Gun, Hose and Tank Assembly provided with these outfits. Models J-60 and L-60 are equipped with a 2 Gal. Paint tank and Model VS-60 with a 5 Gal. Paint tank.

CAB EQUIPMENT HARDWARE

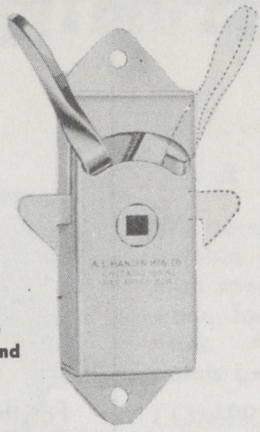


No. 60
(left-hand)

EXTENSION LOCK (left hand) Made entirely in one piece. No loose parts to require fitting or adjusting.1 1/4" hardened striker bolt. Size of lock, 5" x 10". Handle 5" long. Locking device (on left hand only)
NET PRICE EACH: $4.75

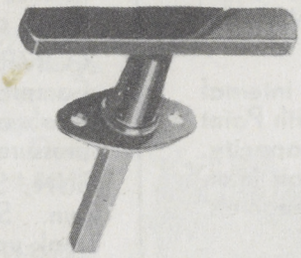


No. 24 SLIDING DOOR HANGER. Weight 1/2 lb. For doors suspended from top and hung on inside or outside of body. Hanger is straight, with no offset. Roller bearing. Hardened steel roller is 1 1/8" dia. Hardened steel axle 1/4" dia. No oiling or attention required. Size, 3" wide by 4" long.
NET PRICE EACH: .85

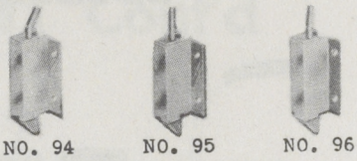


No. 45
Right-hand shown

SLIDING DOOR LOCK. Size 1 5/8" wide x 3 1/2" high, 1 1/8" thick. Locks in open and closed position. Locking bolt when not in use disappears into body of lock. No mortising or blocking. Supplied right or left-hand, complete with striker plates.
NET PRICE EACH $1.35



No. 75 ALL-STEEL "T" HANDLE. Grip 3 1/2" x 5/8". 5/16" square steel shank, 3" long. Fits all standard locks. Supplied in black Japan, Chromium or nickle plated finish.
NET PRICE EACH .83

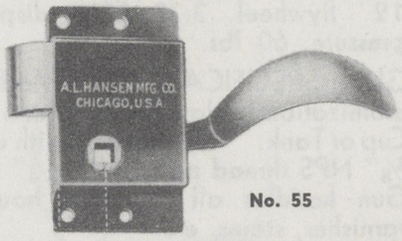


NO. 94 NO. 95 NO. 96

No. 94 LOCK. 1/2" offset. For single side or rear door. Supplied complete with rods 26" Long standard.
NET PRICE EACH $3.70

No. 95 LOCK. 1/2" offset. For double rear or side doors. Supplied complete with rods 26" long standard.
NET PRICE EACH $4.84

No. 96 LOCK. 1/2" offset. Adaptable to side or rear double doors. Inside handle for left hand door included. Supplied complete with rods 26" long Standard.
NET PRICE EACH $6.55



No. 55

CAB LOCK. Size 3 3/8" high, 2" wide, 3 1/4" handle, 1" striker bolt. Built-in pull handle. Flange on face of lock makes it easy to install squarely on door. No mortising required. Supplied in right or left hand.
NET PRICE EACH $1.33

Respirators



R2000 RESPIRATOR
NET PRICE COMPLETE: $3.85



R2031 CARTRIDGE
For low concentrations of light organic fumes, vapors and gases generated in paint spraying, degreasing, dry cleaning, cementing, etc. It absorbs benzene, xylene, toluene, gasoline, naphtha, acetone, turpentine, and others.
NET PRICE EACH: .60

THESE ADVANTAGES ARE STANDARD WITH ALL R2000 RESPIRATORS

POSITIVE PROTECTION
Face mask fits any face safely, has smoothly-rounded, positive sealing edges. Positive-acting inhalation valve of pure rubber admits air at lightest breath and seals tightly on exhalation. Basal exhalation valve for complete air expulsion, minimum resistance. Valve cannot stick open. Moisture cannot collect. Dust cannot enter.

UNEXCELLED COMFORT AND VISION
Because of its pliable rubber, face mask does not tire or irritate wearer, even when worn for extended periods. The small size of the filter means a smaller filter container can be used for UNOBSTRUCTED front and side vision and added comfort. Despite the far greater filter efficiency there is no increase in low breathing resistance.

LIGHT AND DURABLE RETAINER COVER

EASILY DISMANTLED FOR CLEANING WITHOUT SPECIAL TOOLS

SPECIAL EASY-TO-ATTACH FACE SHIELD AVAILABLE TO PROTECT EYES AND UPPER FACE AGAINST FLYING PARTICLES

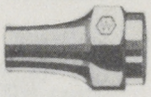
FACELETS OF KNITTED COTTON
A clean, comfortable, washable facelet is supplied with every respirator, and additional quantities are available to keep workers' faces from contact with rubber.

SIMPLICITY OF INTERCHANGING
One twist of the wrist removes the outer cover; a second twist removes the inner ring. Thus, the respirator converts quickly, easily to the dust or Chemical cartridge type you require.

WE DO NOT SELL YOUR CUSTOMERS.

Weatherhead

S. A. E. NUT

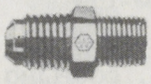


Long Type

Cat No.	Tube Size	Length	Std. Pkg.	Price Each
41x2	1/8	3/4	10	.24
41x3	3/16	13/16	20	.20
41x4	1/4	15/16	20	.22
41x5	5/16	1,1/8	20	.30
41x6	3/8	1,5/16	10	.47
41x7	7/16	1,1/2	5	.66
41x8	1/2	1,5/8	10	.85
41x10	5/8	1,7/8	..	1.43
41x12	3/4	2,3/16	..	1.97
		Short Type		
1110x3	3/16	5/8	20	.20
1110x4	1/4	3/4	20	.22
1110x5	5/16	7/8	20	.28
1110x6	3/8	1	10	.43
1110x8	1/2	1,1/8	10	.79

Unless specified the long nut will be furnished.

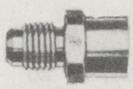
S. A. E. MALE CONNECTOR



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
48x2	1/8	1/8	10	.26
48x3	3/16	1/8	10	.23
48x4	1/4	1/8	20	.24
48x4A	1/4	1/4	10	.40
48x5	5/16	1/8	20	.31
48x5A	5/16	1/4	10	.44
48x6	3/8	1/4	10	.64
48x6A	3/8	1/8	10	.64
48x6B	3/8	3/8	5	.87
48x7	7/16	1/4	5	.76
48x8	1/2	3/8	5	.84
48x8A	1/2	1/2	..	.99
48x10	5/8	1/2	..	1.73
48x12	3/4	1/2	..	1.97

Nuts not included

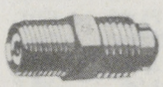
S. A. E. FEMALE CONNECTOR



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
46x3	3/16	1/8	5	.30
46x4	1/4	1/8	10	.34
46x4A	1/4	1/4	10	.47
46x5	5/16	1/8	10	.36
46x5A	5/16	1/4	10	.51
46x6	3/8	1/4	5	.62
46x6A	3/8	1/8	5	.67
46x8	1/2	3/8	..	1.01
46x10	5/8	1/2	..	2.20

Nuts not included

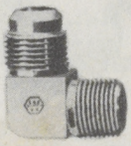
S. A. E. CHECK VALVE



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
43x4	1/4	1/8	5	.67
43x5	5/16	1/8	5	.76
43x6	3/8	1/4	5	1.03

Nuts not included

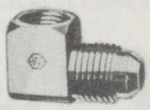
S. A. E. MALE ELBOW



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
49x2	1/8	1/8	10	.40
49x3	3/16	1/8	10	.35
49x4	1/4	1/8	10	.35
49x4A	1/4	1/4	10	.52
49x5	5/16	1/8	10	.43
49x5A	5/16	1/4	10	.64
49x6	3/8	1/4	10	.79
49x6A	3/8	1/8	10	.79
49x6B	3/8	3/8	5	1.18
49x7	7/16	1/4	5	1.02
49x8	1/2	3/8	5	1.05
49x8A	1/2	1/2	..	2.09
49x10	5/8	1/2	..	2.75
49x12	3/4	1/2	..	3.71

Nuts not included

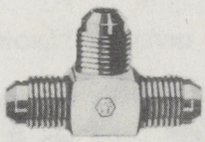
S. A. E. FEMALE ELBOW



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
50x4	1/4	1/8	10	.44
50x5	5/16	1/8	10	.52
50x6	3/8	1/4	5	1.18
50x8	1/2	3/8	..	2.13
50x10	5/8	1/2	..	3.28

Nuts not included

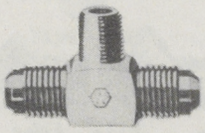
S. A. E. TEE



Cat No.	Tube Size	Std. Pkg.	Price Each
44x3	3/16	5	.52
44x4	1/4	5	.55
44x5	5/16	5	.67
44x6	3/8	5	1.07
44x8	1/2	..	1.79
44x10	5/8	..	4.59
44x12	3/4	..	5.84

Nuts not included

S. A. E. TEE

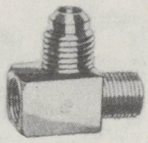


Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
45x3	3/16	1/8	5	.51
45x4	1/4	1/8	5	.52
45x5	5/16	1/8	5	.64
45x6	3/8	1/4	5	1.01
45x8	1/2	3/8	..	1.72
45x10	5/8	1/2	..	4.40

Nuts not included

S. A. E. TEE

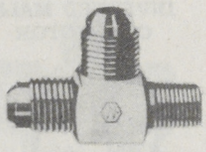
For Oil Filter Installation



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
56x3	3/16	1/8M-1/8F	5	.81
56x4	1/4	1/8M-1/8F	5	.87

Nuts not included

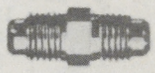
S. A. E. TEE



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
51x3	3/16	1/8	5	.51
51x4	1/4	1/8	5	.52
51x5	5/16	1/8	5	.64
51x6	3/8	1/4	5	1.02
51x8	1/2	3/8	..	1.73
51x10	5/8	1/2	..	4.40

Nuts not included

S. A. E. UNION

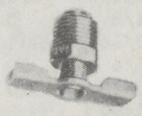


Cat No.	Tube Size	Std. Pkg.	Price Each
42x2	1/8	5	.36
42x3	3/16	10	.35
42x4	1/4	10	.40
42x5	5/16	10	.41
42x6	3/8	5	.64
42x7	7/16	5	1.07
42x8	1/2	5	1.07
42x10	5/8	..	1.79
42x12	3/4	..	2.20

Nuts not included

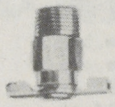
DRAIN COCKS

DRAIN COCK



Cat No.	Pipe Thread	Flow	Std. Pkg.	Price Each
135	1/8	3/16	10	.52
145	1/4	1/4	10	.71

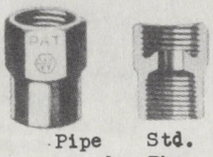
DRAIN COCK



Cat. No.	Pipe Thread	Flow	Std. Pkg.	Price Each
130	1/8	9/32	5	.67
140	1/4	3/8	5	.98
190	1/4	11/32	5	.87
230	3/8	3/8	5	1.73

Weatherhead

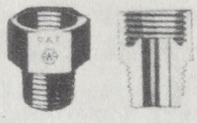
INVERTED FEMALE CONNECTOR



Cat No.	Tube Size	Pipe Thread	Std. Pkg	Price Each
250x3	3/16	1/8	5	.36
250x4	1/4	1/8	10	.36
250x5	5/16	1/8	10	.43
250x6	3/8	1/4	5	.63
252x8	1/2	3/8	..	1.02
252x10	5/8	1/2	..	2.26
252x12	3/4	3/4	..	3.39

Nuts not included

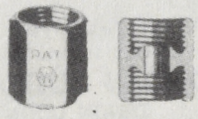
INVERTED MALE CONNECTOR



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
200x2	1/8	1/8	10	.26
200x3	3/16	1/8	10	.15
200x4	1/4	1/8	20	.19
234x4	1/4	1/4	10	.31
200x5	5/16	1/8	20	.22
234x5	5/16	1/4	10	.31
232x6	3/8	1/8	10	.48
200x6	3/8	1/4	10	.35
236x6	3/8	3/8	5	.83
200x7	7/16	1/4	5	.58
234x8	1/2	1/4	..	.83
200x8	1/2	3/8	5	.62
238x8	1/2	1/2	..	1.91
202x10	5/8	1/2	..	1.56
202x12	3/4	3/4	..	2.02
202x14	7/8	3/4	..	3.17

Nuts not included

INVERTED UNION



Cat No.	Tube Size	Std. Pkg.	Price Each
300x2	1/8	5	.36
300x3	3/16	10	.28
300x4	1/4	10	.28
300x5	5/16	10	.34
300x6	3/8	5	.66
302x8	1/2	..	.99
302x10	5/8	..	2.26
302x12	3/4	..	3.38

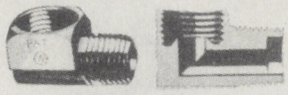
Nuts not included.

INVERTED NUT



Cat No.	Tube Size	Std. Pkg.	Price Each
105x2	1/8	10	.15
105x3	3/16	20	.12
105x4	1/4	20	.12
105x5	5/16	20	.15
105x6	3/8	10	.21
105x7	7/16	5	.36
105x8	1/2	10	.36
105x10	5/8	..	1.01
105x12	3/4	..	1.43
105x14	7/8	..	1.79

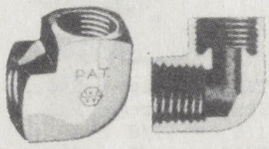
INVERTED MALE ELBOW



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
400x2	1/8	1/8	10	.34
400x3	3/16	1/8	10	.28
400x4	1/4	1/8	10	.30
400x5	5/16	1/8	10	.33
434x4	1/4	1/4	10	.59
434x5	5/16	1/4	10	.62
432x6	3/8	1/8	10	.72
400x6	3/8	1/4	10	.55
436x6	3/8	3/8	5	1.19
400x7	7/16	1/4	5	.83
400x8	1/2	3/8	5	.98
438x8	1/2	1/2	..	2.68
434x8	1/2	1/4	..	1.19
402x10	5/8	1/2	..	2.26
402x12	3/4	3/4	..	4.36
402x14	7/8	3/4	..	5.57

Nuts not included

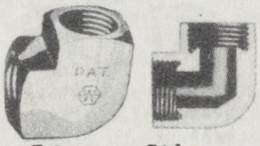
INVERTED FEMALE ELBOW



Cat No.	Tube Size	Pipe Thread	Std Pkg	Price Each
450x3	3/16	1/8	5	.70
450x4	1/4	1/8	10	.70
450x5	5/16	1/8	10	.74
450x6	3/8	1/4	5	1.19
452x8	1/2	3/8	..	1.91
452x10	5/8	1/2	..	3.59

Nuts not included

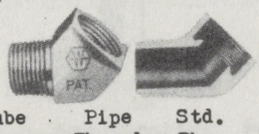
INVERTED ELBOW



Cat No.	Tube Size	Std. Pkg.	Price Each
502x3	3/16	5	.83
502x4	1/4	10	.83
502x5	5/16	10	1.05
502x6	3/8	5	1.38
502x8	1/2	..	1.93
502x10	5/8	..	3.59

Nuts not included

INVERTED 45 DEGREE ELBOW



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
352x3	3/16	1/8	5	.55
352x4	1/4	1/8	10	.55
352x5	5/16	1/8	10	.64
352x6	3/8	1/4	5	.91
352x8	1/2	3/8	..	1.50
352x10	5/8	1/2	..	2.39

Nuts not included

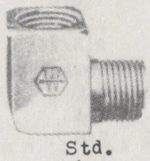
PIPE FITTINGS

PIPE ELBOW



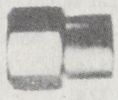
Cat No.	Pipe Thread	Std. Pkg.	Price Each
3500x2	1/8	10	.40
3500x4	1/4	10	.52
3500x6	3/8	5	.99

STREET ELBOW



Cat No.	Pipe Thread	Std. Pkg.	Price Each
3400x2	1/8	10	.39
3400x4	1/4	10	.52
3400x6	3/8	5	.99
3400x8	1/2	..	1.87
	REDUCING ELBOW		
3404x2	1/4F-1/8M	5	.59

REDUCING COUPLING



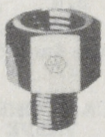
Cat No.	Pipe Thread	Std. Pkg.	Price Each
3304x2	1/4x1/8	10	.43
3306x2	3/8x1/8	5	.67
3306x4	3/8x1/4	5	.64
3308x6	1/2x3/8	5	.84

PIPE BUSHING



Cat No.	Pipe Thread	Std. Pkg.	Price Each
3224x2	1/4x1/8	20	.24
3226x2	3/8x1/8	10	.36
3226x4	3/8x1/4	10	.35
3228x2	1/2x1/8	5	.55
3228x4	1/2x1/4	5	.55
3228x6	1/2x3/8	5	.55

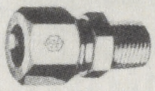
PIPE ADAPTER



Cat No.	Pipe Thread	Std. Pkg.	Price Each
3200x2	1/8	10	.40
3200x4	1/4	10	.62
3200x6	3/8	5	.87
	REDUCING ADAPTER		
3204x2	1/4F-1/8M	10	.44
3206x4	3/8F-1/4M	5	.67
3208x6	1/2F-3/8M	5	.84

Weatherhead

COMPRESSION MALE CONNECTOR



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
68x2	1/8	1/8	10	.26
68x3	3/16	1/8	10	.27
68x4	1/4	1/8	20	.27
68x4A	1/4	1/4	10	.40
68x5	5/16	1/8	20	.35
68x5A	5/16	1/4	10	.44
68x6	3/8	1/4	10	.62
68x6A	3/8	1/8	10	.59
68x6B	3/8	3/8	5	1.10
68x8	1/2	3/8	5	1.29
68x10	5/8	1/2	..	1.84
68x12	3/4	1/2	..	2.62
		With Long Nut		
168x6	3/8	1/4	10	1.01

COMPRESSION FEMALE ELBOW



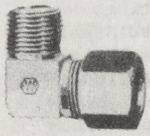
Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
70x3	3/16	1/8	5	.48
70x4	1/4	1/8	10	.54
70x5	5/16	1/8	10	.70
70x6	3/8	1/4	5	1.01
70x8	1/2	3/8	..	1.97
		With Long Nut		
170x6	3/8	1/4	5	1.38

COMPRESSION NUT



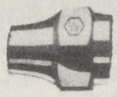
Cat No.	Tube Size	Std. Pkg.	Price Each
61x2	1/8	10	.09
61x3	3/16	20	.09
61x4	1/4	20	.09
61x5	5/16	20	.12
61x6	3/8	10	.19
61x8	1/2	10	.36
61x10	5/8	..	.61
61x12	3/4	..	.76

COMPRESSION MALE ELBOW



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
69x2	1/8	1/8	10	.44
69x3	3/16	1/8	10	.46
69x4	1/4	1/8	10	.47
69x4A	1/4	1/4	10	.57
69x5	5/16	1/8	10	.58
69x5A	5/16	1/4	10	.71
69x6	3/8	1/4	10	.87
69x6A	3/8	1/8	10	.90
69x6B	3/8	3/8	5	1.54
69x8	1/2	3/8	5	1.87
69x10	5/8	1/2	..	2.97
69x12	3/4	1/2	..	3.80
		With Long Nut		
169x6	3/8	1/4	10	1.32

LONG COMPRESSION NUT



Cat No.	Tube Size	Std. Pkg.	Price Each
2102x3	3/16	10	.28
2102x4	1/4	10	.28
2102x5	5/16	10	.40
2102x6	3/8	10	.54
2102x8	1/2	10	.98

DOUBLE COMPRESSION NUT



Cat No.	Tube Size	Std. Pkg	Price Each
6100x2	1/8	10	.12
6100x3	3/16	20	.12
6100x4	1/4	20	.15
6100x5	5/16	20	.19
6100x6	3/8	10	.24

COMPRESSION FEMALE CONNECTOR



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
66x2	1/8	1/8	5	.35
66x3	3/16	1/8	5	.33
66x4	1/4	1/8	10	.36
66x4A	1/4	1/4	10	.62
66x5	5/16	1/8	10	.40
66x5A	5/16	1/4	10	.78
66x6	3/8	1/4	5	.78
66x6A	3/8	1/8	5	.75
66x8	1/2	3/8	..	1.67
66x10	5/8	1/2	..	2.29
		With Long Nut		
166x6	3/8	1/4	5	1.13

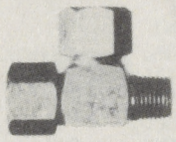
DOUBLE COMPRESSION MALE CONNECTOR



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
6200x2	1/8	1/8	10	.15
6200x3	3/16	1/8	10	.17
6234x3	3/16	1/4	5	.46
6200x4	1/4	1/8	10	.20
6234x4	1/4	1/4	10	.32
6200x5	5/16	1/8	20	.24
6200x6	3/8	1/4	10	.46
6232x6	3/8	1/8	10	.43

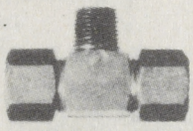
6234x3 replaces Chevrolet 836049
6232x6 used on Buick
Nut not included

COMPRESSION TEE



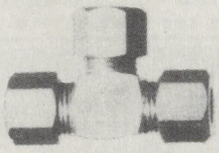
Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
71x3	3/16	1/8	5	.67
71x4	1/4	1/8	5	.78
71x5	5/16	1/8	5	.83
71x6	3/8	1/4	5	1.10
71x8	1/2	3/8	..	3.12
		With Long Nut		
171x6	3/8	1/4	5	1.79

COMPRESSION TEE



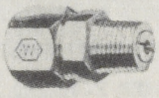
Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
72x3	3/16	1/8	5	.67
72x4	1/4	1/8	5	.78
72x5	5/16	1/8	5	.83
72x6	3/8	1/4	5	1.10
72x8	1/2	3/8	..	3.14
		With Long Nut		
172x6	3/8	1/4	5	1.79

COMPRESSION TEE



Cat No.	Tube Size	Std Pkg.	Price Each
64x3	3/16	5	.79
64x4	1/4	5	.79
64x5	5/16	5	.91
64x6	3/8	5	1.38
64x8	1/2	..	3.52

COMPRESSION CHECK VALVE



Cat No.	Tube Size	Pipe Thread	Std. Pkg.	Price Each
63x3	3/16	1/8	5	.67
63x4	1/4	1/8	5	.70
63x5	5/16	1/8	5	.75
63x6	3/8	1/4	5	1.01

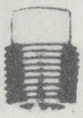
COMPRESSION UNION



Cat No.	Tube Size	Std. Pkg.	Price Each
62x2	1/8	5	.42
62x3	3/16	10	.43
62x4	1/4	10	.46
62x5	5/16	10	.55
62x6	3/8	5	.69
62x8	1/2	..	1.85
62x10	5/8	..	2.75
62x12	3/4	..	4.07
		With Long Nut	
162x6	3/8	5	1.43

Weatherhead

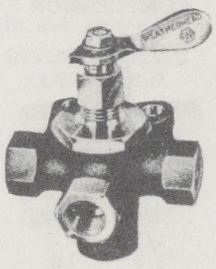
SQUARE HEAD PIPE PLUG



Cat No.	Pipe Thread	Std. Pkg.	Price Each
3151x2	1/8	20	.19
3151x4	1/4	10	.28
3151x6	3/8	5	.46
3151x8	1/2	5	.58

3 & 4-WAY VALVES

Heavy Duty

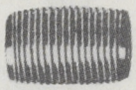


Cat. No. 6749 (3 way)
1/4 female all 3 ways — Price Each 4.84

Cat. No. 6747 (4 way)
3 inlets 1/4 F pipe
1 outlet 1/4 F pipe — Price Each 5.70

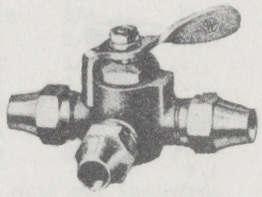
For use on trucks or fire engines where 3 tanks are used.

CLOSE NIPPLE



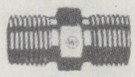
Cat No.	Pipe Thread	Std. Pkg.	Price Each
3326x2	1/8	20	.23
3326x4	1/4	10	.32
3326x6	3/8	10	.58
3326x8	1/2	5	.83

3-WAY VALVE



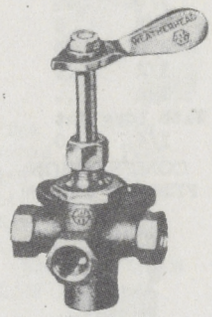
Cat. No. A-6793
5/16 comp. all 3 ways
Complete with long nuts and sleeves
Price Each 4.84

HEXAGON NIPPLE



Cat No.	Pipe Thread	Std. Pkg.	Price Each
3325x2	1/8	20	.28
3325x4	1/4	10	.44
3325x6	3/8	10	.58
	REDUCING NIPPLE		
3325x4x2	1/4x1/8	10	.44

4-WAY VALVE



With long (thru the floor) stem and indicator handle.
Cat No. 6748
1/4 female 3 inlets
1/4 female outlet — Price Each 6.77

MERCHANDISERS

Contents of F-91-92-93 Assortments



F-93 (Total 218 Pieces) Net Price: $41.53

ALL OF BOTH THE F-91 AND F-92, PLUS

2	W68x6	Comp. Conn.
2	W69x6	Comp. Elbow
1	W71x4	Comp. Tee
1	W71x5	Comp.
1	W72x4	Comp.
1	W72x5	Comp.
1	W76x3	Comp. Oil Filter Tee
1	x4	Comp. Oil Filter Tee
1	W56x3	S.A.E. Oil Filter Tee
1	x4	S.A.E. Oil Filter Tee
2	3750x2	Pipe Oil Filter Tee
2	3304x2	Reducing Couplings
1	6550x3	Double Comp. Filter Tee
1	6550x4	Double Comp. Filter Tee
1	6100x2	Double Comp. Nut (additional)
1	320	S.A.E. Angle Shut-Off
1	325	S.A.E. Angle Shut-Off
1	530	S.A.E. Straitway Shut-Off
1	630	S.A.E. Straitway Shut-Off
1	555	Comp. Angle Shut-Off
1	655	Comp. Angle Shut-Off
1	660	Comp. Straitway Shut-Off
1	690	Comp. Straitway Shut-Off

F-91 (Total 106 Pieces) Net Price: $17.33

10	W60x3	Comp. Sleeve
10	x4	Comp. Sleeve
10	x5	Comp. Sleeve
5	x6	Comp. Sleeve
5	W61x3	Comp. Nut
5	x4	Comp. Nut
5	x5	Comp. Nut
3	x6	Comp. Nut
1	W62x3	Comp. Union
1	x4	Comp. Union
1	x5	Comp. Union
2	W68x3	Comp. Connector
3	W68x4	Comp. Connector
3	x5	Comp. Connector
2	W69x3	Comp. Elbow
3	x4	Comp. Elbow
3	x5	Comp. Elbow
7	400x3	Inverted Elbow
7	x4	Inverted Elbow
7	x5	Inverted Elbow
2	135	Drain Cock
2	145	Drain Cock
5	59x4	Ford Nuts
4	3224x2	Bushings

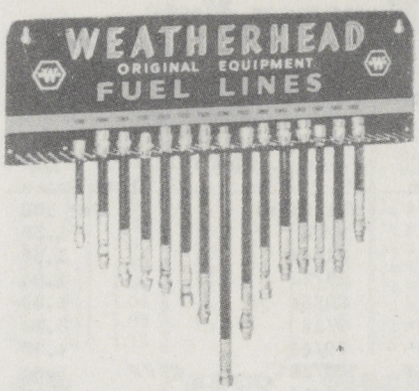
F-92 (Total 191 Pieces) Net Price: $28.44

ALL OF THE F-91 PLUS

5	105x3	Inverted Nut
5	x4	Inverted Nut
5	x5	Inverted Nut
2	200x3	Inverted Conn.
3	x4	Inverted Conn.
3	x5	Inverted Conn.
2	W41x3	S.A.E. Nut
3	x4	S.A.E. Nut
3	x5	S.A.E. Nut
2	W48x3	S.A.E. Connector
3	x4	S.A.E. Connector
3	x5	S.A.E. Connector
2	W49x3	S.A.E. Elbow
3	x4	S.A.E. Elbow
3	x5	S.A.E. Elbow
3	3151x2	Plug
2	x4	Plug
2	3226x4	Bushings
3	3326x2	Close Nipples
2	x4	Close Nipples
2	3327x2	Long Nipples
2	3400x2	Street Elbow
2	x4	Street Elbow
2	6100x2	Double Comp. Nut
2	x3	Double Comp. Nut
2	x4	Double Comp. Nut
2	x5	Double Comp. Nut
2	6200x3	Double Comp. Connector
2	x4	Double Comp. Connector
2	x5	Double Comp. Connector
2	6400x3	Double Comp. Elbow
2	x4	Double Comp. Elbow
2	x5	Double Comp. Elbow

SIZE OF CABINET
11½ Wide x 9 in. High x 8½ Deep

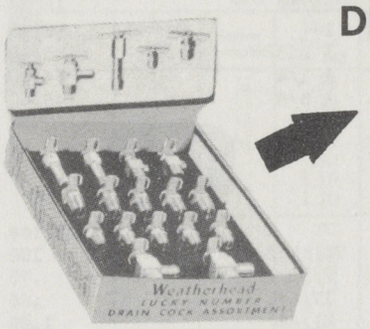
Weatherhead



MERCHANDISERS

DEALER ASSORTMENT No. H-128 NET PRICE:- $10.23

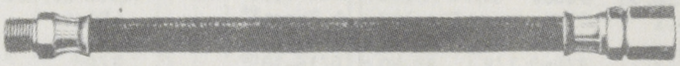
Qty	No.	Car	Year	Use
1	11000	Chrysler De Soto Plymouth	1932-5	Gas
1	11001	Chrysler Dodge	1932-47	Oil
		Kaiser Frazer	1947	Oil
		De Soto Plymouth	1931-47	Oil
		Lafayette Nash	1935-6	Oil
1	11006	Hudson Terraplane	1932-6	Gas
1	11009	Ford 8	1932-47	Gas
1	11032	Pontiac 1935-6 &	1939-46	Gas
1	11033	Cadillac La Salle Oldsmobile	1935-6	Gas
1	11035	Hudson	1935-46	Gas
1	11041	Nash Lafayette	1937-41	Gas
1	11042	Dodge Plymouth	1936	Gas
1	11043	Chrysler De Soto	1936	Gas
		Dodge Truck	1937-46	Gas
		Reo	1934-6	...
1	11057	Dodge	1940-46	Gas
1	11059	Chrysler De Soto Dodge Plymouth	1937-46	Gas
1	11060	Oldsmobile	1937-8	Gas
		Oldsmobile 6	1937-46	...
1	11066	Pontiac	1937-8	Gas
		Studebaker	1937-41	Gas
1	11050	Chevrolet Truck	1935-9	Gas



DRAIN COCK ASSORTMENT NO. DC-711

Contents:- Five No. 135, five No. 145, two No. 150, two No. 6660 and two No. 185 Drain Cocks for draining radiator or engine block of all models of cars and trucks. NET PRICE:- $7.59
The No. 185 is especially adaptable to Chevrolet.
The No. 6660 is especially adaptable to Plymouth and studebaker.
The No. 150 is especially adaptable to Pontiac.

FLEXIBLE FUEL LINE ASSEMBLIES



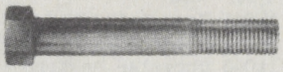
NUMERICAL LISTING OF ORIGINAL EQUIPMENT FUEL LINES

Cat No	Use	Year	Car	Price Each
11000	Gas	1932-5	Chrysler, DeSoto, Dodge Plymouth	.94
11001	Oil	1932-47	Chrysler, Dodge	.94
		1931-47	DeSoto, Plymouth	
		1947	Kaiser, Frazer	
		1935-6	Nash, Lafayette	
11004	Gas	1931	DeSoto, Plymouth	1.32
11006	Gas	1932-6	Hudson 6	1.32
		1932-6	Terraplane 6	
11007	Gas	1933-4	Terraplane 8	1.32
		1933-4	Hudson 8	
11008	Gas	1932-3	Ford 4	1.05
11009	Gas	1932-47	Ford 8	.77
		1936-8	Lincoln	
		1939-47	Mercury	
11017	Oil	1933-4	Oldsmobile	1.05
11018	Gas	1933-4	Pontiac	.99
11023	Gas	1932-6	Studebaker	1.21
11024	Gas	1934	Nash, Lafayette	1.45
11025	Oil	1934	Nash, Lafayette	.94
11025	Gas	1937-9	Willys	.94
11026	Gas	1933-6	Willys	1.45
11027	Oil	1933-6	Willys	1.21
11030	Vacuum	1935-7	Oldsmobile	1.21
11031	Grease	1934-6	Chrysler. DeSoto, Dodge	1.05
		1935-6	Plymouth	
11032	Gas	1935-6 & 1939-47	Pontiac	.88
11033	Gas	1935-6	LaSalle, Olds	1.19
		1941-48	Olds 6	
		1936-8	G.M.C. Truck	
11034	Oil	1934-47	Studebaker	1.21
11035	Gas	1937-47	Hudson 6	1.32
		1935-47	Hudson 8	
		1937-9	Terraplane 8	
11037	Gas	1934-5	LaSalle	1.16
		1933-4	Oldsmobile 8	
11038	Gas	1936-40	Cadillac	1.16
		1937-40	LaSalle	
11041	Gas	1935-47	Nash, Lafayette- Model 20	1.10
		1939-47	Nash, Lafayette- Model 10	
		1937-47	Nash, Lafayette- Model 80	
		1937-47	Studebaker	
11042	Gas	1936	Dodge, Plymouth	1.10
11043	Gas	1936	Chrysler, DeSoto	.94
		1937-47	Dodge Truck, Plymouth Truck	
		1934-6	Reo	
11044	Oil	1934-41	Packard	.94
11045	Grease	1932	Plymouth	1.82
11047	Grease	1932-4	Dodge	1.21
11048	Grease	1934-5	Dodge	2.09
11050	Gas	1935-9	Chevrolet Truck	.94
11051	Gas	1935	Packard	1.43
		1947	Kaiser. Frazer	
11054	Gas	1935	Nash-Lafayette-Model 10	.99
11056	Gas	1937	Chrysler - Model C17	1.06
11057	Gas	1937	Chrysler - Model C14 & C15	1.10
		1938	Chrysler - All Models	
		1938	DeSoto	
		1940-7	Dodge	
11059	Gas	1937	Chrysler - Model C16	1.08
		1939-47	Chrysler - All Models	
		1937	DeSoto	
		1939-47	DeSoto - Model S7	
		1937-9	Dodge	
		1937-47	Plymouth	
11060	Gas	1937-8	Oldsmobile 8	1.16
		1937-47	Oldsmobile 6	
11062	Oil	1937-47	Nash-Lafayette	.94
11063	Gas	1935-47	Packard	1.43
11065	Gas	1936-8	Nash-Lafayette - Model 10	.99
11066	Gas	1937-8	Pontiac	.99
11069	Gas	1938-9	American Bantam	1.49
11070	Gas	1939-47	Oldsmobile	1.05
11071	Gas	1939-47	Cadillac	1.43
11072	Gas	1940-1	American Bantam	1.49
11073	Gas	1940	Buick	1.87
11074	Oil	1939-47	Studebaker	1.43
11075	Oil	1939-40	Packard	.94
11076	Gas	1941-7	Cadillac	1.43
11077	Gas	1940-7	Buick	2.04
11078	Gas	1942-6	Chevrolet Truck	1.32
11079	Gas	1947-8	Plymouth	1.65
11080	Gas	1946-8	Willys Jeep	.99
11081	Gas	Military	Willys and Ford Jeep	1.54
11082	Gas	1948	Ford 6 & 8, Lincoln Mercury, Ford Truck	.77
11083	Gas	1948	Dodge	1.65
11084	Gas	1948	Chrysler & DeSoto	1.65
11085	Gas	1948	Buick	2.20
11086	Gas	1948	Buick	2.20
11300		1942-45	Ford Truck	1.10
11301	Oil	1941	G.M.C. Truck	.83
11305	Oil		G.M.C. Maple Leaf	.83
11461	Gas	1940-1	Crosley	1.27
11087	Gas	1946-8	Crosley	1.21
11088	Gas	1946-8	Crosley	.99
11089	Gas	1946-8	Willys Station Wagon	1.16
11090	Oil	1948	Lincoln	1.21

AUTOMOTIVE HARDWARE

Heat Treated Hexagon Head Cap Screws

COARSE THREAD (U.S.S.)



FINE THREAD (S.A.E.)

1/4" Diam.

Stock Size	List Price Per 100
1/4x1/2	1.30
1/4x5/8	1.35
1/4x3/4	1.40
1/4x7/8	1.50
1/4x1	1.60
1/4x1 1/4	1.80
1/4x1 1/2	2.00
1/4x1 3/4	2.20
1/4x2	2.40
1/4x2 1/4	2.60
1/4x2 1/2	2.80
1/4x2 3/4	3.00
1/4x3	3.30
1/4x3 1/4	4.00
1/4x3 1/2	4.70
1/4x4	6.10

5/16" Diam.

Stock Size	List Price Per 100
5/16x1/2	1.50
5/16x5/8	1.60
5/16x3/4	1.70
5/16x7/8	1.80
5/16x1	1.90
5/16x1 1/4	2.10
5/16x1 1/2	2.30
5/16x1 3/4	2.50
5/16x2	2.70
5/16x2 1/4	2.90
5/16x2 1/2	3.20
5/16x2 3/4	3.50
5/16x3	3.80
5/16x3 1/4	4.60
5/16x3 1/2	5.40
5/16x4	7.00

3/8" Diam.

Stock Size	List Price Per 100
3/8x1/2	1.90
3/8x5/8	2.00
3/8x3/4	2.10
3/8x7/8	2.20
3/8x1	2.30
3/8x1 1/4	2.50
3/8x1 1/2	2.70
3/8x1 3/4	3.00
3/8x2	3.30
3/8x2 1/4	3.60
3/8x2 1/2	3.90
3/8x2 3/4	4.30
3/8x3	4.70
3/8x3 1/4	5.30
3/8x3 1/2	5.90
3/8x4	7.70
3/8x4 1/2	9.50
3/8x5	11.30
3/8x5 1/2	13.10
3/8x6	14.90

7/16" Diam.

Stock Size	List Price Per 100
7/16x3/4	3.00
7/16x7/8	3.10
7/16x1	3.20
7/16x1 1/4	3.50
7/16x1 1/2	3.80
7/16x1 3/4	4.10
7/16x2	4.50
7/16x2 1/4	4.90
7/16x2 1/2	5.30
7/16x2 3/4	5.70
7/16x3	6.20
7/16x3 1/4	6.70
7/16x3 1/2	7.20
7/16x4	8.60
7/16x4 1/2	10.60
7/16x5	12.60
7/16x5 1/2	14.60
7/16x6	16.60

1/2" Diam.

Stock Size	List Price per 100
1/2x3/4	4.70
1/2x7/8	4.90
1/2x1	5.10
1/2x1 1/4	5.50
1/2x1 1/2	5.90
1/2x1 3/4	6.30
1/2x2	6.70
1/2x2 1/4	7.20
1/2x2 1/2	7.70
1/2x2 3/4	8.20
1/2x3	8.70
1/2x3 1/4	9.20
1/2x3 1/2	9.80
1/2x4	11.00
1/2x4 1/2	13.40
1/2x5	15.80
1/2x5 1/2	18.20
1/2x6	20.60

9/16" Diam.

Stock Size	List Price Per 100
9/16x1	7.90
9/16x1 1/4	8.40
9/16x1 1/2	8.90
9/16x1 3/4	9.40
9/16x2	10.00
9/16x2 1/4	10.60
9/16x2 1/2	11.20
9/16x2 3/4	11.80
9/16x3	12.40
9/16x3 1/2	13.60
9/16x4	15.00
9/16x4 1/2	17.50
9/16x5	20.50
9/16x5 1/2	23.50
9/16x6	26.50

5/8" Diam.

Stock Size	List Price per 100
5/8x1	8.60
5/8x1 1/4	9.20
5/8x1 1/2	9.80
5/8x1 3/4	10.40
5/8x2	11.00
5/8x2 1/4	11.60
5/8x2 1/2	12.20
5/8x2 3/4	12.80
5/8x3	13.50
5/8x3 1/2	15.00
5/8x4	16.60
5/8x4 1/2	18.60
5/8x5	22.60
5/8x5 1/2	26.60
5/8x6	30.60

7/8" Diam.

Stock Size	List Price Per 100
7/8x2	24.60
7/8x2 1/2	27.20
7/8x3	30.00
7/8x3 1/2	33.00
7/8x4	37.00
7/8x4 1/2	41.00
7/8x5	45.00
7/8x5 1/2	54.00
7/8x6	63.00

3/4" Diam.

Stock Size	List Price Per 100
3/4x1 1/4	13.30
3/4x1 1/2	14.10
3/4x1 3/4	14.90
3/4x2	15.70
3/4x2 1/4	16.50
3/4x2 1/2	17.30
3/4x2 3/4	18.10
3/4x3	18.90
3/4x3 1/2	20.80
3/4x4	22.80
3/4x4 1/2	25.50
3/4x5	30.90
3/4x5 1/2	36.30
3/4x6	41.70

1" Diam.

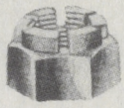
Stock Size	List Price Per 100
1x2	36.00
1x2 1/2	40.00
1x3	44.00
1x3 1/2	49.00
1x4	55.00
1x4 1/2	61.00
1x5	68.00
1x5 1/2	80.00
1x6	92.00

STANDARD DIMENSIONS

Screw Diam.	Threads per Inch Fine (S.A.E.)	Threads per Inch Coarse (U.S.S.)	Head Width Across Flats.	Head Height
1/4	28	20	7/16	3/16
5/16	24	18	1/2	15/64
3/8	24	16	9/16	9/32
7/16	20	14	5/8	21/64
1/2	20	13	3/4	3/8
9/16	18	12	13/16	27/64
5/8	18	11	7/8	15/32
3/4	16	10	1	9/16
7/8	16	9	1 1/8	21/32
1	14	8	1 5/16	3/4

"Papco" Hexagon Nuts

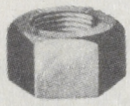
S.A.E. CASTELLATED NUTS
American Standard Light



(FINE THREAD)

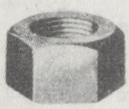
Nut Size & Thread	Width Across Flats	Thickness	List Price Per 100
1/4-28	7/16	9/32	1.32
5/16-24	1/2	21/64	1.55
3/8-24	9/16	13/32	1.84
7/16-20	5/8	29/64	2.30
1/2-20	3/4	9/16	3.28
9/16-18	7/8	39/64	4.83
5/8-18	15/16	23/32	5.64
3/4-16	1 1/16	13/16	8.97
7/8-14	1 1/4	29/32	12.36
1-14	1 7/16	1	18.40
1 1/8-12	1 5/8	1 5/32	25.88
1 1/4-12	1 13/16	1 1/4	34.50
1 3/8-12	2	1 3/8	46.00

U.S.S. AUTOMOTIVE NUTS
Coarse Thread Nuts with S.A.E. Outside Dimensions



Nut Size & Thread	Width Across Flats	Thickness	List Price Per 100
1/4-20	7/16	7/32	.75
5/16-18	1/2	17/64	.86
3/8-16	9/16	21/64	1.09
7/16-14	5/8	3/8	1.50
1/2-13	3/4	7/16	1.90
9/16-12	7/8	31/64	2.88
5/8-11	15/16	35/64	3.68
3/4-10	1 1/16	21/32	5.75
7/8-9	1 1/4	49/64	9.20
1-8	1 7/16	7/8	13.34

S.A.E. PLAIN NUTS
American Standard Light



(FINE THREAD)

Nut Size & Thread	Width Across Flats	Thickness	List Price Per 100
1/4-28	7/16	7/32	.75
5/16-24	1/2	17/64	.86
3/8-24	9/16	21/64	1.09
7/16-20	5/8	3/8	1.50
1/2-20	3/4	7/16	1.90
9/16-18	7/8	31/64	2.88
5/8-18	15/16	35/64	3.68
3/4-16	1 1/16	21/32	5.75
7/8-14	1 1/4	49/64	9.20
1-14	1 7/16	7/8	13.34
1 1/8-12	1 5/8	63/64	18.98
1 1/4-12	1 13/16	1 3/32	25.88
1 3/8-12	2	1 13/64	36.23
1 1/2-12	2 3/16	1 5/16	47.15

Pedlar's Steel Bins



"SPECIAL" "SPECIAL" "SPECIAL"

STEEL BINS FOR AUTOMOTIVE AND PARTS STORAGE.

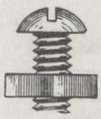
Ask our Sales Representative about our "SPECIAL DEAL" whereby you may obtain this genuine PEDLAR STEEL BIN AT A REDUCED PRICE, with an assortment of CAP SCREWS. This is the ideal storage unit for your Automotive parts. Keep this in mind next time our Salesman drops in to see you, or if you prefer contact,

D. ACKLAND & SON LIMITED
WINNIPEG, MAN.
or our nearest branch office.

EVERY ORDER IS A RUSH ORDER WITH US.

AUTOMOTIVE HARDWARE

"Papco" Stove Bolts



(with square nuts)

ROUND HEAD - FLAT HEAD

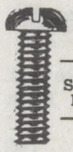


Specify Head Type Required

Standard Packages, 100 Bolts and Nuts

Stock Size	List Price per 100	Stock Size	List Price per 100	Stock Size	List Price per 100	Stock Size	List Price per 100
1/8 x 1/2	.88	3/16 x 1	1.20	1/4 x 1/2	1.95	1/4 x 2 1/2	2.90
1/8 x 3/4	.92	3/16 x 1 1/4	1.30	1/4 x 5/8	1.60	1/4 x 3	3.40
1/8 x 1	1.00	3/16 x 1 1/2	1.40	1/4 x 3/4	1.65	5/16 x 1	2.80
1/8 x 1 1/4	1.10	3/16 x 1 3/4	1.55	1/4 x 1	1.75	5/16 x 1 1/4	3.00
1/8 x 1 1/2	1.20	3/16 x 2	1.75	1/4 x 1 1/4	1.90	5/16 x 1 1/2	3.20
3/16 x 1/2	1.04	3/16 x 2 1/2	2.10	1/4 x 1 1/2	2.05	5/16 x 2	3.80
3/16 x 5/8	1.08	3/16 x 3	2.45	1/4 x 1 3/4	2.20	5/16 x 2 1/2	4.40
3/16 x 3/4	1.12			1/4 x 2	2.40		

"Papco" Machine Screws





BRIGHT NICKEL PLATED

Screw Dia.	Threads per Inch	Screw Length	List Price per 100	Screw Dia.	Threads per Inch	Screw Length	List Price per 100
6	32	1/4	.75	10	32	1/4	.90
		3/8	.75			3/8	.90
		1/2	.75			1/2	.90
		3/4	.90			3/4	1.10
		1	.90			1	1.10
		1 1/4	1.10			1 1/4	1.45
		1 1/2	1.10			1 1/2	1.45
8	32	1/4	.90	12	24	1/2	1.45
		3/8	.90			3/4	1.45
		1/2	.90			1	1.45
		3/4	1.10	1/4	20	1/2	1.45
		1	1.10			3/4	1.45
		1 1/4	1.45			1	1.80
		1 1/2	1.45			1 1/4	1.80

"Papco" Hexagon Machine Screw Nuts





BRIGHT NICKEL PLATED

Size	Threads per Inch	Dimensions		List Price per 100
		Across Flats	Thickness	
6	32	5/16	7/64	.90
8	32	11/32	1/8	1.10
10	24	3/8	1/8	1.20
10	32	3/8	1/8	1.20
12	24	7/16	5/32	1.40
1/4	20	7/16	3/16	1.80

"Papco" License Plate Bolts



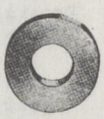
Stock No. LB-1 Retail Price per 100 $6.00
Stock No. LB-2 Retail Price per 100 $3.00
Consisting of Bolt, Washer and Thumb Nut.

"Papco" Self-Locking Palnuts



Stock No	Size And Thread	Width Across Flats	Retail Price Per 100	Application
PN-5	5/16-24 NF	1/2	1.70	Universal, Nash.
PN-6	3/8-24 NF	9/16	1.40	Chevrolet, Dodge, De Soto, Plymouth Chrysler.
PN-7	7/16-20 NF	5/8	2.00	Universal.

Plain Steel Washers

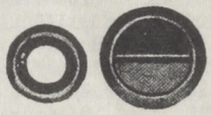




"PAPCO" PLAIN STEEL WASHERS are free from burrs and have smooth, flat surfaces. Packed in 1-pound and 5-pound packages. Order by bolt size. Specify package size.

Bolt Size	Hole Size	Outside Diam.	Thick-ness	App. No. to Lb.	Retail Price per 5 lb. pkg.
1/8	3/16	7/16	3/64	580	3.06
3/16	1/4	9/16	3/64	360	3.06
1/4	5/16	3/4	1/16	150	2.43
5/16	3/8	7/8	1/16	115	2.43
3/8	7/16	1	5/64	70	2.43
7/16	1/2	1 1/4	3/32	45	2.43
1/2	9/16	1 3/8	7/64	26	2.03
9/16	5/8	1 1/2	7/64	22	2.03
5/8	11/16	1 3/4	9/64	13	2.03
3/4	13/16	2	9/64	10	2.03
7/8	15/16	2 1/4	5/32	7	2.03
1	1 1/16	2 1/2	5/32	5	2.03
1 1/8	1 3/16	2 3/4	5/32	5	2.03
1 1/4	1 5/16	2 3/4	5/32	5	2.03
1 1/2	1 9/16	3 1/4	11/64	3	2.03

Countersunk Finishing Washers



Standard Type

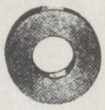


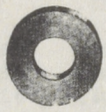
Flush Type

COUNTERSUNK STANDARD TYPE

Stock No.	Screw Size	Inside Diam.	Outside Diam.	Retail Price Per 100
E-1	6	7/16	.167	.60
E-3	8	1/2	.193	.65
E-5	10	37/64	.228	1.00
E-7	12	5/8	.234	1.20
E-9	1/4	23/32	.288	1.50
E-11	5/16	7/8	.375	1.95
E-13	3/8	1	.484	2.50
		COUNTERSUNK FLUSH TYPE		
H-6	6	23/64	11/64	.50
H-8	8	13/32	13/64	.60
H-10	10	15/32	13/64	.75
H-14	1/4	5/8	17/64	1.00

Steel Spacer Washers





Size of Hole	Outside Diam.	Retail Price Per 100	Size of Hole	Outside Diam.	Retail Price per 100
3/16	1/2	.90	7/8	1 3/8	2.25
1/4	9/16	.90	1	1 1/2	2.50
5/16	5/8	1.00	1 1/8	1 5/8	3.50
3/8	3/4	1.00	1 1/4	1 7/8	3.50
7/16	13/16	1.00	1 3/8	2	4.50
1/2	7/8	1.00	1 1/2	2 1/4	4.75
9/16	1	1.80	1 5/8	2 3/8	6.00
5/8	1	1.80	1 3/4	2 1/2	6.00
11/16	1 1/16	1.90	2	2 3/4	6.50
3/4	1 1/8	1.90	2 1/4	3 1/4	9.00
13/16	1 1/4	1.90	2 1/8	3	8.50

"Papco" Frost Plugs



Cup Type



Standard Type

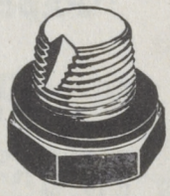
STANDARD TYPE

Plug Size	Stock No.	Retail Price ea.	Plug Size	Stock No.	Retail Price ea.
3/8	FP16	.03	1 3/16	FP27	.06
7/16	FP1	.03	1 1/4	FP10	.06
1/2	FP24	.03	1 1/4	FP10T	.09
9/16	FP25	.03	1 5/16	FP28	.09
5/8	FP2	.03	1 3/8	FP11	.09
11/16	FP29	.03	1 7/16	FP11X	.09
3/4	FP3	.03	1 1/2	FP12	.09
13/16	FP4	.03	1 5/8	FP13	.09
7/8	FP5	.05	1 3/4	FP14	.12
15/16	FP6	.05	1 7/8	FP17	.12
1	FP7	.05	2	FP18	.12
1 1/32	FP26	.06	2 1/16	FP18X	.12
1 1/16	FP8	.06	2 1/8	FP19	.12
1 1/8	FP9	.06	2 1/4	FP20	.15

CUP TYPE

Plug Size	Stock No.	Retail Price ea.	Plug Size	Stock No.	Retail Price ea.
7/16	FP42C	.06	1 1/4	FP37C	.15
9/16	FP43C	.06	1 1/2	FP38C	.18
3/4	FP30C	.09	1 9/16	FP39C	.18
7/8	FP31C	.09	1 5/8	FP44C	.18
15/16	FP32C	.12	1 3/4	FP47C	.21
1	FP33C	.12	1 15/16	FP41C	.21
1 1/8	FP34C	.15	1 61/64	FP45C	.21
1 3/16	FP35C	.15	1 31/32	FP48C	.14
1 7/32	FP36C	.15	2	FP46C	.21

Self-Tapping Drain Plugs



These oversize hardened, self-tapping drain plugs are a real time saver when oil pan threads are worn or stripped. Simply hold the plug in a straight position and tighten. Each "Papco" Drain Plug is supplied with a copper gasket.

Stock No.	Size & Thread	APPLICATION
DP-8	1/2-20 O.S.	Cadillac 1940-48. G.M.C. 1939-48 Chevrolet 1928-48. Pontiac 1933-48 Oldsmobile 1939-48
DP-10	5/8-18 O.S.	Buick 1938-48. Packard 1935-48
DP-11	11/16-16 O.S.	Buick 1929-38. LaSalle 1928-40 G.M.C. 1937-39. Oldsmobile 1931-38.

AUTOMOTIVE HARDWARE

Tooth Lock Washers

EXTERNAL TYPE

Stock No.	Bolt or Screw Size	Out. Diam.	Thick-Ness.	Retail Price Per 100
106	#6 (1/8)	5/16	.018	.53
108	#8 (5/32)	3/8	.020	.54
110	#10 (3/16)	13/32	.022	.54
114	1/4	1/2	.025	.65
118	5/16	19/32	.030	.79
120	3/8	11/16	.035	1.05
122	7/16	25/32	.035	1.50
124	1/2	7/8	.040	1.95
126	9/16	31/32	.040	2.63
128	5/8	1 1/16	.045	3.68
132	3/4	1 1/4	.050	5.03
134	7/8	1 7/16	.055	7.70
136	1"	1 5/8	.062	10.35
		INTERNAL TYPE		
206	#6 (1/8)	9/32	.018	.53
208	#8 (5/32)	21/64	.020	.54
210	#10 (3/16)	3/8	.022	.54
214	1/4	15/32	.025	.65
218	5/16	19/32	.030	.79
220	3/8	11/16	.035	1.05
222	7/16	25/32	.035	1.50
224	1/2	7/8	.040	1.95
226	9/16	31/32	.040	2.63
228	5/8	1 1/16	.045	3.68
232	3/4	1 1/4	.050	5.03
234	7/8	1 3/8	.055	7.70
236	1"	1 5/8	.062	10.35
		COUNTERSUNK TYPE		
306	#6 (1/8)	19/64	.018	.79
308	#8 (5/32)	11/32	.018	.83
310	#10 (3/16)	3/8	.022	.94
314	1/4	15/32	.022	1.10
318	5/16	5/8	.025	1.73
320	3/8	25/32	.030	2.70

Engine Studs

Stock No.	Diam.	Length Overall	Thread and Length	Thread and Length	Retail Each
401	5/16	2	7/8 S.A.E.	3/4 U.S.S.	.15
411	3/8	2 1/8	1 S.A.E.	3/4 U.S.S.	.15
412	3/8	2 1/8	1 U.S.S.	3/4 U.S.S.	.15
413	3/8	3	1 1/4 S.A.E.	3/4 U.S.S.	.16
414	3/8	4	2 U.S.S.	3/4 U.S.S.	.20
415	3/8	4	2 S.A.E.	3/4 U.S.S.	.20
419	7/16	1 3/4	9/16 S.A.E.	1/2 U.S.S.	.09
422	7/16	3 5/8	2 S.A.E.	3/4 U.S.S.	.22
423	7/16	4	2 S.A.E.	3/4 S.A.E.	.22
426	7/16	4	2 U.S.S.	3/4 U.S.S.	.22
428	1/2	4	2 S.A.E.	3/4 U.S.S.	.25
430	1/2	6	2 S.A.E.	3/4 U.S.S.	.33

Square Head

Stock No.	Dia.	Leng.	Thread Length	Retail Each	Stock No.	Dia.	Leng.	Thread Length	Retail Each
CB45	5/16	3 1/4	2 1/4	.09	CB75	3/8	5 1/2	3 1/2	.18
CB46	3/8	3 1/4	2 1/4	.12	CB77	3/8	7	5	.30
CB71	5/16	3 1/8	1 3/4	.12	CB79	3/8	9	5	.36
CB72	5/16	4 1/4	2 3/4	.15					

"Papco" Spring Centre Bolts Fillister Head

Stock No.	Dia.	Leng.	Thread Length	Retail Each	Stock No.	Dia.	Leng.	Thread Length	Retail Each
CB51	5/16	3 1/2	2 1/2	.07	CB58	3/8	8	5	.25
CB52	5/16	5	3	.09	CB58X	3/8	10	5	.30
CB53	5/16	7	3	.12	CB64	3/8	12	5	.35
CB54	3/8	4	3	.10	CB59	7/16	7	3	.25
CB55	3/8	5	3	.11	CB61	7/16	9	5	.40
CB56	3/8	6	3	.12	CB62	7/16	12	5	.50
CB57	3/8	7	3	.15	CB63	1/2	10	4	.50

"Papco" Clevis Yokes



DROP FORGED

5 Sizes will service all Cars and Trucks

Stock No.	G	A	T	E	F	Retail Price Each
			SIZE CHART			
AY26	1/4	2	1/4	9/32	5/8	.40
AY27	5/16	2 1/4	5/16	11/32	3/4	.40
AY28	3/8	2 1/2	3/8	7/16	7/8	.60
AY29	7/16	2 7/8	7/16	1/2	1	.68
AY30	1/2	3	1/2	9/16	1 1/8	.90

Clevis Pins

Stock No.	Dia. x Length	Retail Each	Stock No.	Dia. x Length	Retail Each
CP224	1/4 x 51/64	.03	CP213	3/8 x 7/8	.06
CP225	1/4 x 1	.03	CP235	3/8 x 1	.06
CP203	5/16 x 3/4	.03	CP236	3/8 x 1 3/32	.06
CP226	5/16 x 31/32	.05	CP237	3/8 x 1 1/4	.09
CP227	5/16 x 1	.05	CP238	3/8 x 1 3/8	.09
CP205	5/16 x 1 1/8	.05	CP239	3/8 x 1 1/2	.09
CP228	5/16 x 1 1/4	.06	CP241	7/16 x 1 15/64	.12
CP229	5/16 x 1 5/16	.06	CP242	7/16 x 1 1/2	.12
CP208	5/16 x 1 1/2	.09	CP244	7/16 x 1 3/4	.15
CP230	5/16 x 1 9/16	.09	CP251	1/2 x 1 1/4	.12
CP 231	5/16 x 1 3/4	.09	CP245	1/2 x 1 27/64	.13
CP212	3/8 x 13/16	.06	CP246	1/2 x 1 1/2	.15

Double Thickness Nuts

Stock No.	Size	Height	Width	Retail Each
DN6	3/8"-24 Th.	9/16"	17/32"	.09
DN7	7/16"-20 Th.	39/64"	5/8"	.10
DN8	1/2"-20 Th.	11/16"	3/4"	.12
DN9	9/16"-18 Th.	49/64"	7/8"	.14
DN10	5/8"-18 Th.	27/32"	15/16"	.18
DN12	3/4"-16 Th.	1"	1 1/16"	.21
DN14	7/8"-14 Th.	1 5/32"	1 1/4"	.35
DN16	1"-14 Th.	1 5/16"	1 7/16"	.55

"Papco" Primer Wire

for Dash Pull Starters, Exhaust Cutouts, Radiator Shutters



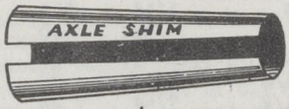
for Exhaust Cutouts, Heater Valves, Carburetor Chokes

.036 LIGHT			.051 MEDIUM			.060 HEAVY		
Stock No.	Ft. to Box	Retail Each	Stock No.	Ft. to Box.	Retail Each	Stock No.	Ft. to Box.	Retail Each
PW24	25 ft.	1.00	PW25	25 ft.	1.00	PW26	25 ft.	1.00
PW49	50 ft.	1.80	PW50	50 ft.	1.80	PW51	50 ft.	1.80
PW99	100 ft.	3.00	PW100	100 ft.	3.00	PW101	101 ft.	3.00

"Papco" Anti-Shimmy Wedges

Stock No.	Degree	Width	Retail Each	Stock No.	Degree	Width	Retail Each
ASW10	1/2	1 3/4	.40	ASW17	1	2"	.45
ASW11	1	1 3/4	.40	ASW18	1 1/2	2"	.50
ASW12	1 1/2	1 3/4	.45	ASW19	2	2"	.50
ASW13	2	1 3/4	.45	ASW20	2 1/2	2"	.55
ASW14	2 1/2	1 3/4	.50	ASW21	3	2"	.55
ASW15	3	1 3/4	.50				

"Papco" Axle Shims



LIGHT TYPE .005 THICK		
Stock No.	Length	Retail Each
AS1	2 7/8"	.15
AS2	4 1/8"	.20
AS3	6 3/4"	.45

HEAVY TYPE .010 THICK		
Stock No.	Length	Retail Each
AS1X	2 7/8"	.20
AS2X	4 1/8"	.30
AS3X	6 3/4"	.60

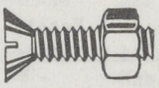
ALL ORDERS RECEIVE CAREFUL ATTENTION.

AUTOMOTIVE HARDWARE

Sheet Metal Screws

Screw Diam.	Screw Length	Drill Hole	List Price Per Gross	Screw Diam.	Screw Length	Drill Hole	List Price Per Gross
4	3/8	5/64"	.78	10	5/8	9/64"	1.14
4	1/2	5/64"	.80	10	3/4	9/64"	1.20
4	5/8	5/64"	.84	10	7/8	9/64"	1.26
6	3/8	3/32"	.80	10	1	9/64"	1.32
6	1/2	3/32"	.84	10	1 1/4	9/64"	1.58
6	5/8	3/32"	.88	10	1 1/2	9/64"	1.70
6	3/4	3/32"	.90	10	1 3/4	9/64"	1.82
6	7/8	3/32"	.92	12	5/8	5/32"	1.42
6	1	3/32"	.96	12	3/4	5/32"	1.50
8	3/8	1/8"	.90	12	7/8	5/32"	1.60
8	1/2	1/8"	.96	12	1	5/32"	1.70
8	5/8	1/8"	1.00	12	1 1/4	5/32"	1.90
8	3/4	1/8"	1.06	12	1 1/2	5/32"	2.10
8	7/8	1/8"	1.12	14	3/4	3/16"	1.80
8	1	1/8"	1.20	14	7/8	3/16"	1.92
8	1 1/4	1/8"	1.30	14	1	3/16"	2.04
10	1/2	9/64"	1.10	14	1 1/4	3/16"	2.30

Brass Brake Shoe Bolts



Flat Head Brass Bolt 3/8-16 x 1½" long.
Supplied with Hexagon Steel Nuts.

"Papco" Brass Brake Shoe Bolts are for attaching Brake Lining Blocks to avoid scoring. Used on buses and trucks.

No. BS 3824 Retail Price Each .35

"Papco" Brass Shim Stock

The 6" wide x 100" long rolls are supplied in metal dispenser tubes for easy use.



THREE INCH WIDTHS

36 INCH STRIPS Stock No.	Thickness	Retail Each	100 INCH STRIPS Stock No.	Thickness	Retail Each
SM31	.001	.50	SM3C1	.001	1.20
SM32	.002	.50	SM3C2	.002	1.20
SM33	.003	.55	SM3C3	.003	1.30
SM34	.004	.55	SM3C4	.004	1.30
SM35	.005	.60	SM3C5	.005	1.40
SM36	.006	.60	SM3C6	.006	1.40
SM37	.007	.65	SM3C7	.007	1.50
SM38	.008	.65	SM3C8	.008	1.50
SM310	.010	.75	SM3C10	.010	1.70
SM312	.012	.80	SM3C12	.012	1.90
SM315	.015	.90	SM3C15	.015	2.20

SIX INCH WIDTHS

36 INCH STRIPS Stock No.	Thickness	Retail Each	100 INCH STRIPS Stock No.	Thickness	Retail Each
SM61	.001	.90	SM6C1	.001	2.20
SM62	.002	.90	SM6C2	.002	2.20
SM63	.003	1.00	SM6C3	.003	2.50
SM64	.004	1.00	SM6C4	.004	2.50
SM65	.005	1.10	SM6C5	.005	2.70
SM66	.006	1.10	SM6C6	.006	2.70
SM67	.007	1.20	SM6C7	.007	3.00
SM68	.008	1.20	SM6C8	.008	3.00
SM610	.010	1.30	SM6C10	.010	3.20
SM612	.012	1.40	SM6C12	.012	3.40
SM615	.015	1.60	SM6C15	.015	3.70

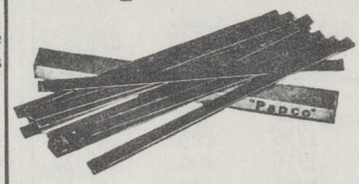


"Papco" Steel Shim Stock

"PAPCO" STEEL SHIM STOCK is hard shim temper and uniform in thickness. Supplied in strips 100 inches long by 6 inches wide as listed.

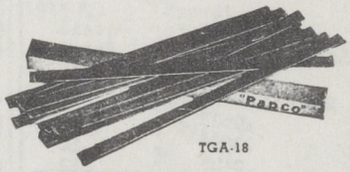
Stock No.	Thickness	Retail Each	Stock No.	Thickness	Retail Each
SS61	.001	2.80	SS65	.005	2.80
SS61½	.0015	2.80	SS66	.006	2.80
SS62	.002	2.40	SS68	.008	3.00
SS62½	.0025	2.40	SS610	.010	3.20
SS63	.003	2.60	SS612	.012	3.40
SS64	.004	2.60	SS615	.015	3.60

"Papco" Thickness Gauge Lengths



These Thickness Gauges are made from No. 1 Grade Swedish Steel. Each gauge is 12" long by ½" wide, with a hole punched in the end for hanging. The thickness in thousandths is permanently etched on the gauge.

Stock No.	Thickness	Retail Each	Stock No.	Thickness	Retail Each
TG1½	.0015	.80	TG12	.012	.60
TG2	.002	.80	TG13	.013	.60
TG2½	.0025	.80	TG14	.014	.60
TG3	.003	.65	TG15	.015	.60
TG4	.004	.65	TG18	.018	.60
TG5	.005	.65	TG20	.020	.45
TG6	.006	.65	TG22	.022	.45
TG7	.007	.60	TG25	.025	.45
TG8	.008	.60	TG28	.028	.45
TG9	.009	.60	TG30	.030	.45
TG10	.010	.60	TG32	.032	.45
TG11	.011	.60	TG40	.040	.45



TGA-18

"PAPCO" THICKNESS GAUGE LENGTHS ASSORTMENT

This assortment consists of one each of 18 different sizes of thickness gauge lengths.
Retail Price Each $10.00



"Papco" Thickness Gauge Lengths Display

No. TG102

This display Assortment contains 6 each, 17 different sizes of Thickness Gauge Lengths 12" long.
Retail Price Each $55.80

"Papco" Gasoline Tank Caps

The outer casing of these caps is made of a hard aluminum alloy and cannot rust. The bayonet is made of reinforced spring steel, cadmium plated. Caps are supplied with specially treated gasket for long life. 3" outside diameter and come in two sizes.

No. 2010
FOR 1⅞" SPOUT
Used on: Ford 1932-48, Hudson, Lincoln, Mercury, Packard, etc.
Retail Price Each .45



No. 2020
FOR 1½" SPOUT
Used on: Chevrolet, Chrysler, Dodge, DeSoto, Ford 1949, Nash, Oldsmobile, Plymouth, Pontiac, Studebaker, etc.
Retail Price Each .45

No. 2000 — UNIVERSAL GAS TANK CAP
FOR 1½" SPOUT



This cap is made of heavy aluminum, and has the side knurled for improved grip. Supplied with cork gasket and cadmium plated steel bayonet. The No. 2000 Cap is also used as an oil filter cap on some cars.
Retail price each .15

High Pressure Air Hose Clamps



These clamps are for use on high pressure applications such as Gas Station Air Hose, Welding Hose etc. Flexible form fit band and special nut exert a uniform clamping pressure. Cadmium plated.

Stock No.	Hose Size O.D.	Stock No.	Hose Size O.D.	Stock No.	Hose Size O.D.
HC28	1/2"-5/8"	HC29	5/8"-3/4"	HC30	13/16"-7/8"
Retail Price	.12	Retail Price	.12	Retail Price	.12

AUTOMOTIVE HARDWARE

S.A.E. Steel Washers

Stock No.	Bolt Size	Out-side Dia.	In-side Dia.	Thick-ness	Appr. No.per lb.	Net Price
W81	1/8	3/8	5/32	3/64	800	.84 lb.
W82	3/16	1/2	7/32	1/16	350	.68 lb.
W82	1/4	5/8	9/32	1/16	225	.56 lb.
W84	5/16	11/16	11/32	1/16	200	.56 lb.
W86	7/16	15/16	15/32	1/16	105	.56 lb.
W87	1/2	1 1/16	17/32	3/32	55	.51 lb.
W88	9/16	1 3/16	19/32	3/32	45	.51 lb.
W89	5/8	1 5/16	21/32	3/32	36	.51 lb.
W90	3/4	1 1/2	13/16	1/8	22	.47 lb.
W91	7/8	1 3/4	15/16	1/8	16	.47 lb.
W92	1	2	1 1/16	1/8	12	.47 lb.

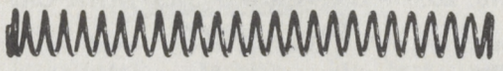
"Papco" Utility Springs

EXTENSION TYPE



Stock No.	Length	Outside Diameter	Wire Size	Retail Price
604	5 1/2"	1/2"	.080"	.15
605	6 1/2"	7/16"	.041"	.15
606	5"	7/16"	.062"	.12
607	5 3/4"	1/4"	.028"	.12
608	6"	5/16"	.034"	.12
609	4"	1/4"	.028"	.12
610	3"	11/32"	.041"	.12
611	4 1/2"	1/2"	.062"	.15
612	2 1/8"	5/32"	.028"	.09
616	1 1/4"	3/16"	.014"	.09
617	1 1/8"	1/4"	.020"	.09
623	2 1/2"	3/16"	.028"	.09
624	3 3/4"	1/4"	.034"	.09
625	2 1/2"	5/16"	.034"	.09
626	3 1/8"	7/16"	.041"	.09
627	2 1/4"	7/32"	.034"	.09
628	1 7/8"	9/32"	.034"	.09
629	4 3/4"	3/8"	.045"	.12
630	5 3/8"	5/16"	.041"	.12
631	11"	3/8"	.054"	.24
632	11"	1/2"	.062"	.24
633	9/16"	1/8"	.018"	.09
634	3/4"	1/8"	.018"	.09
635	1 1/8"	9/32"	.020"	.09
636	1 1/8"	3/16"	.025"	.09
658	7 1/4"	5/16"	.045"	.15
659	6 3/4"	5/16"	.034"	.15
661	6 3/8"	7/16"	.054"	.15
684	15/16"	1/8"	.020"	.09
685	1 7/8"	3/8"	.031"	.15

COMPRESSION TYPE



Stock No.	Length	Outside Diameter	Wire Size	Retail Price
601	11 1/2"	3/8"	.051"	.15
602	11 1/2"	5/8"	.057"	.15
603	10"	7/8"	.081"	.15
615	1 1/2"	1/4"	.041"	.09
618	2 3/8"	9/32"	.022"	.09
620	2 1/2"	5/8"	.081"	.09
622	3"	7/16"	.062"	.09
639	7/8"	3/32"	.020"	.09
646	3"	5/8"	.062"	.09
650	2 3/4"	3/8"	.045"	.09
653	3 3/8"	5/8"	.080"	.12
655	2 3/4"	7/16"	.045"	.09
656	2"	3/8"	.034"	.09
676	5"	3/16"	.026"	.09
677	5"	1/4"	.034"	.09
678	5"	5/16"	.047"	.09
679	5"	5/16"	.054"	.09
680	5"	3/8"	.054"	.09
681	5"	3/8"	.062"	.12
682	5"	7/16"	.062"	.12
683	5"	1/2"	.072"	.12

"PAPCO" RIM PARTS FOR DEMOUNTABLE RIMS

RIM BOLTS

Stock No.	Size and Group Listings	Retail Price
14D	7/16-20 x 3 1/4", Slab Head Can be used as substitute for 14B, 14C, 20C, 20D Bolts, discontinued. Used on General Motors Cars 1925-30.	.19
22C	7/16-20 x 3 1/8", Round Head Can be used as substitute for 5A, 5B, 5C, 9A, 22B Bolts discontinued. Used on Chrysler Cars and others, 1920-30.	.14

RIM CLAMPS

Stock No.	Size and Group Listings	Retail Price
33W	Used with 14D Bolt. Used on Chevrolet, Pontiac, Buick, 1925-30.	.23
81C	Used with 22C Bolt. Used on Chrysler cars, 1928-30.	.23

RIM NUTS

Stock No.	Size and Group Listings	Retail Price
10N	7/16-20 Thread, 3/4 Hex. Used with 14D Bolt, Used on General Motors Cars, 1925-30.	.08
16N	7/16-20 Thread, 3/4 Hex. Tapered. Used with 22C, 14D Bolts. Substitute for 18N Nut discontinued. Same as Wheel Nut 472R.	.08

"Papco" Wheel Hub Parts

CAR SPECIFICATIONS

Year	Model	Front(F) Rear(R)	Hub Bolt	Retail Each	Hub Nut	Retail Each
BUICK						
1934-36	840,44,46	F&R	B227	.17		
1937-40	46,48,49	F&R	B227	.17		
1937-38	44	F	B236R&L	.17	472R&L	.08
		R	B271R&L	.12	472R&L	.08
1939-40	44	F	B236R	.17	472R	.08
		R	B272	.12	472R	.08
1941	(6 Hub) Bolts)	F	B271R	.12	472R	.08
		R	B272	.12	472R	.08
1941-49	All	F&R	B227	.17		
CHEVROLET						
1931	All Wire	F&R	B272	.12	472R	.08
1932	All	F	B272	.12	472R	.08
1932	All	F	B272	.12	472R	.08
		R	B271R	.12	472R	.08
1933	CA Mast	F	B236R	.17	472R	.08
		R	B272	.12	472R	.08
1934	DA Mast	F	B236R	.17	472R	.08
		R	B272	.12	472R	.08
1935	EA Mast	F	B236R&L	.17	472R&L	.08
		R	B271R&L	.12	472R&L	.08
1933-35	CC,DC EC Std	F&R	B271R	.12	472R	.08
1936	FC,Std	F&R	B272	.12	472R	.08
1936-38	Master-10	F&R	B271R&L	.12	472R&L	.08
1937-38	Master-12	F	B236R&L	.17	472R&L	.08
		R	B271R&L	.12	472R&L	.08
1939-40	Mast.De-Luxe,10	R	B236R	.17	472R	.08
		F	B271R	.12	472R	.08
1939-40	Master-12	F	B236R	.17	472R	.08
		R	B272	.12	472R	.08
1941-48	All	F	B271R	.12	472R	.08
		R	B272	.12	472R	.08
CHRYSLER						
1932-34	All	F&R	B227R	.17		
1933-35	CL,C12	F&R	B227R	.17		
1933-40	CU,CV,C2, C3,CA,CB, CZ,CI,C8, C9,C10,C11, C14,C15,C17 C19,C20,C21 C23,C24	F&R	B227R	.17		
1936-39	C7,C16 C18,C22	F&R	B23R	.17		

DO YOU NEED MORE ORDER FORMS OR ENVELOPES ?

AUTOMOTIVE HARDWARE

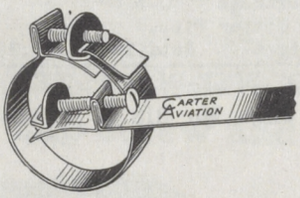
"Papco" Wheel Hub Parts (continued)

Year	Model	Front(F) Rear(R)	Hub Bolt	Retail Each	Hub Nut	Retail Each
CHRYSLER CONT'D.						
1940-48	C25,C28, C34,C38	F&R	B232R&L	.17		
1940-48	C26,C27 C30,C33 C36,C37, C39	F&R	B227R&L	.17		
DE SOTO						
1932-34	All	F&R	B227R	.17		
1935-36	SC,S2	F&R	B227R	.17		
1935-39	SF,S1,S3, S5,S6	F&R	B232R	.17		
1940-48	S7,S8, S10,S11	F&R	B232R&L	.17		
DODGE						
1932-39	All	F&R	B227R	.17		
1940-48	All(Cand. Prod.)	F&R	B232R&L	.17		
FORD						
1928-31	All	F	B245	.12	403N	.17
		R	B244	.12	403N	.17
1932-34	All	F	B245	.12	409N	.09
		R	B253	.15	409N	.09
1935	All(1 piece Hub)	F&R	B245	.12	409N	.09
	All(2 piece Hub)	F	B245	.12	409N	.09
		R	B253	.15	409N	.09
1936-37	All(1 piece Hub)	F&R	B274	.12	409N	.09
1936-37	All(2 piece Hub)	F	B245	.12	409N	.09
1938	All(1 piece Hub)	F&R	B245	.12	409N	.09
1938-39	All(2 piece Hub)	F&R	B274	.12	409N	.09
1940	All	F&R	B282	.12	409N	.09
1941-48	All	F	B274	.12	409N	.09
		R	B282	.12	409N	.09
FORD TRUCK						
1932-35	B.B.	F	B261R&L	.45	405R&L	.40
1935-48	All	F	B279R&L	.45	405R&L	.40
1932-37	Single	R	B262R&L	.45	405R&L	.40
	Dual	R	B262R&L	.45	407-S	.90
	Inner Nut Dual				407R&L	.90
1934-48	Axle Shaft Stud		419	.09		

Year	Model	Front(F) Rear(R)	Hub Bolt	Retail Each	Hub Bolt	Retail Each
GRAHAM						
1938-41	All	F&R	B232R	.17		
HUDSON						
1934	8 Cyl.Wire	F&R	B227R	.17		
1934-49	6 & 8 Cyl. All	F&R	B232R	.17		
MERCURY						
1940	All	F&R	B282	.12	409N	.09
1941-48	All	R	B282	.12	409N	.09
NASH						
1939-40	3980,4080	F&R	B227R	.17		
1939-48	3910,3920, 4010,4020, 4160,4180, 4260,4280	F&R	B232R	.17		
OLDSMOBILE						
1934	All	F&R	B227	.17		
1937-38	6 Cyl.	F	B236R&L	.17	472R&L	.08
		R	B271R&L	.12	472R&L	.08
PACKARD						
1933-49	(Except 1933-36 wood wheels)	F&R	B227R	.17		
1940-41	1800,110, 1900	F&R	B232R	.17		
1939-42	6 Cyl. 35, 36	F	B271R	.12	472R	.08
		R	B272	.12	472R	.08
PLYMOUTH						
1933-39	All	F&R	B232R	.17		
1940-48	All	F&R	B232R&L	.17		
PONTIAC						
1933	All	F	B236R	.17	472R	.08
		R	B272	.12	472R	.08
1934	All	F	B236R	.17	472R	.08
		R	B272	.12	472	.08
	22,25	R	B272	.12	472R	.08
1940	22	F	B236R	.17	472R	.08
		R	B272	.12	472R	.08
	225,25	F	B271R	.12	472R	.08
		R	B272	.12	472R	.08
1941-48	20,22,25	F	B271R	.12	472R	.08
		R	B272	.12	472R	.08
TERRAPLANE						
1932-35	All	F&R	B232R	.17		

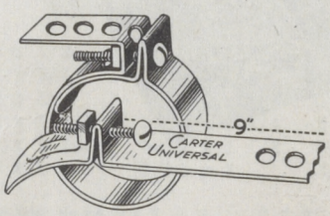
Hose Clamps

AVIATION



Fits Hose 1" to 3" O.D. Simply wrap around hose, pull tightly through nut. Tighten up bolt and roll back surplus with Cotter Pin. Screws and nuts attached.
Retail Price Each .15

UNIVERSAL



Fits Hose 1" to 3" O.D. Complete with Screws and Nuts attached.
Retail Price Each .10

COMBINATION MEASURE AND FUNNEL

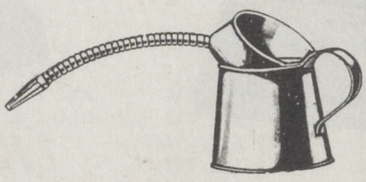
Copper Plated
Government Stamped



No.	Content	Net Price
140	10 Imp. Quarts	1.97 ea.

COMBINATION MEASURE AND FUNNEL

All-way - Copper Plated
Government Stamped



No.	Content	Net Price
101	½ Imp. Quart	1.30 ea.
102	1 Imp. Quart	1.52 ea.
103	2 Imp. Quarts	1.86 ea.
104	4 Imp. Quarts	2.14 ea.

RADIATOR CAN

Slow-Dipt Galvanized
12½" Rigid Spout



No.	Content	Net Price
05	½ Imp. Quart	.95 ea.
010	1 Imp. Quart	1.18 ea.
020	2 Imp. Quarts	1.50 ea.
040	4 Imp. Quarts	2.02 ea.



FUNNEL

and CAN OPENER

No. 10

DEALER NET
$1.80

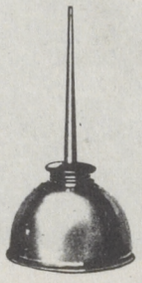
"PAPCO" STOVE PIPE WIRE



Supplied in approximately ¼ lb. coils. Put up in Standard packages of 5 pounds. Approximately 20 coils.

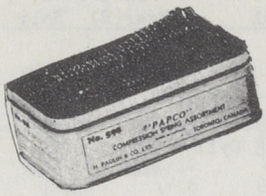
Stock No.	Gauge	Retail Per Box
SPW18	18	$3.15
SPW19	19	$3.15

OILERS



No.	Capacity	Net Price
133	6¾ ozs.	.27 ea.
135	6¾ ozs.	.28 ea.
143	11 ozs.	.36 ea.
145	11 ozs.	.37 ea.

Garage Assortments





"THESE GARAGE ASSORTMENTS CONTAIN ITEMS USED IN EVERY GARAGE EVERY DAY"
"EACH ASSORTMENT CONTAINS ONLY LISTED ITEMS---NO "ODDS" OR "ENDS"
"REFILLS OF INDIVIDUAL ITEMS AVAILABLE FROM STANDARD STOCK"

Assortment K-1
100 Woodruff Keys.
12 sizes. Retail Price 3.10

Assortment K-2
40 Axle Keys. 12 sizes
Retail Price 4.50

Assortment K-3
40 Large size Woodruff keys.
14 sizes. Retail Price 7.00

Assortment MS-1
116 Round head Machine screws and 56 Hexagon nuts.
Retail Price 2.25

Assortment MS-2
116 Oval head machine screws and 56 Hexagon nuts.
Retail Price 2.25

Assortment DS-3
100 Phillips head self tapping sheet metal screws.
Retail Price 2.75

Assortment DS-4
100 Hexagon head self tapping sheet metal screws.
Retail Price 2.50

Assortment DP-7
6 self tapping drain plugs and gaskets.
Retail Price 3.25

Assortment DS-5
135 Oval head self tapping sheet metal screws. 10 sizes.
Retail Price 2.50

Assortment DS-6
135 Binding Head self tapping sheet metal screws. 16 sizes.
Retail Price 2.50

Assortment BB-7
75 Bumber Bolts and Nuts.
16 sizes. Retail Price 20.00

Assortment SMS-7
495 self tapping sheet metal screws, binding and oval heads. 18 sizes.
Retail Price 11.80

Assortment C-10
1000 Cotter Pins. 10 sizes.
Retail Price 4.50

Assortment SW-10
250 Internal type, tooth lock washers. 9 sizes.
Retail Price 2.90

Assortment SW-12
250 External type, tooth lock washers. 9 sizes.
Retail Price 2.90

Assortment LW-15
50 Leather cup washers in sizes from 1" to 1¾"
Retail Price 3.40

Assortment W-20
50 Key washers in sizes from ¾" to 1¾" Retail Price 4.00

Assortment SB-25 Round Head
SB-26 Flat Head
each contains 100 stove bolts and nuts. 12 sizes.
Retail Price 2.50

Assortment S-26 Fine Thread
Assortment S-27 Coarse Thread
75 Cap screws and 50 Hexagon nuts. Retail Price 3.50

Assortment LW-39
39 Lock washers in sizes from 3/16" to 5/8"
Retail Price .30

Assortment FP-40
60 Frost Plugs in both Std. and cup types.
Retail Price 3.75

Assortment PG-44
44 Copper gaskets in 5 sizes.
Retail Price 4.25

Assortment TP-45
45 Taper pins in 15 sizes.
Retail Price 3.40

Assortment CB-50
24 Filister Head centre Bolts with nuts. 2 sizes.
Retail Price 2.25

Assortment SB-55
55 Running board or step bolts with nuts.
Retail Price 2.50

Assortment CB-60
24 Filister head centre bolts with nuts. Retail Price 2.50

Assortment CB-70
24 Square Head Centre bolts with nuts.
Retail Price 3.40

Assortment N-95
95 Hexagon nuts, fine and coarse threads from 1/4" to 9/16" Retail Price 2.25

Assortment FW-100
100 Fender Washers.
4 sizes. Retail Price 2.75

Assortment BW-100
100 Brass washers in sizes from 3/16" to 1/2"
Retail Price 2.75

Assortment W-125
125 Steel spacer washers in sizes from ¼" to 1⅛"
Retail Price 2.75

Assortment FW-130
130 Fibre washers in sizes from 1/8" to 3/4"
Retail Price 1.90

Assortment CP-200
60 Clevis pins. 16 sizes.
Retail Price 4.00

Assortment No. 440
25 Engine Studs and 20 Nuts.
11 sizes. Retail Price 6.25

Assortment No. 596
100 small coil Springs, extension and compression types. Retail Price 4.00

Assortment No. 597
30 Extension Springs.
12 sizes. Retail Price 3.50

Assortment No. 598
40 Compression Springs.
12 sizes. Retail Price 3.50

Assortment No. SM-5
5 Strips Brass shim stock each 3" x 18". .001, .002, .003,.005, .010
Retail Price 1.75

Assortment C-5
100 Cotter Pins.
9 sizes Retail Price .30

"PAPCO" SHEET METAL SCREWS

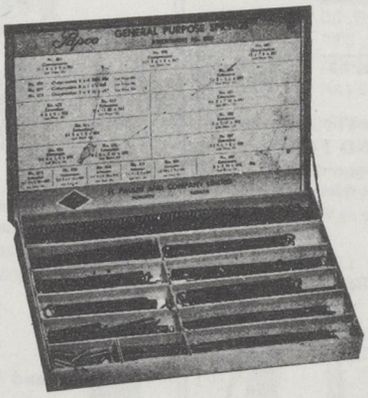


No. SMS-8

1000 Screws, 21 sizes, Binding Oval and Hexagon Heads. Self Tapping Sheet Metal Screws.
Retail Price $23.75

"PAPCO" UTILITY SPRINGS

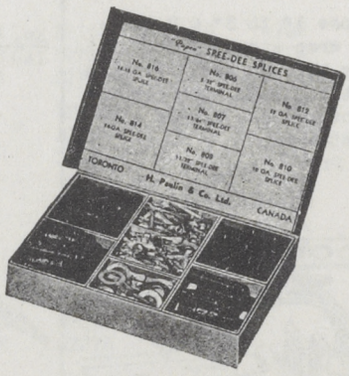
Asst. No. 600



Contains 80 Springs.
Compression and Extension Types. 21 Sizes.
Retail Price: $10.00

"PAPCO" SPEE-DEE SPLICE

Asst. No. 813



Contains 50 Spee-Dee Splice Connectors and Terminals.
7 sizes.
Retail Price $4.00

DO NOT HESITATE TO ASK FOR ANY INFORMATION YOU NEED.

GARAGE ASSORTMENTS Cont'd

"PAPCO" SHEET METAL SCREWS



Assortment No. SMS-9
535 Screws Phillips Head and Hexagon Head. 18 Sizes.
Retail Price $23.75

"PAPCO" ANTI-SHIMMY WEDGES



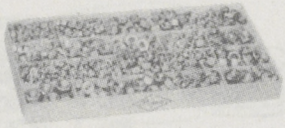
Assortment No. ASW-72
66 Anti-Shimmy wedges. 11 sizes Retail Price $31.50
Assortment No. ASW-73
20 Wedges. 11 sizes.
Retail Price $8.90

"PAPCO" FIBRE WASHERS



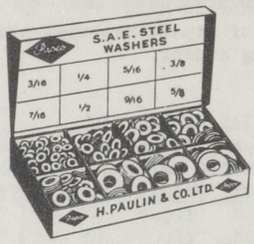
Assortment No. 490
480 Fibre Washers. 24 sizes. Two thicknesses.
Retail Price $3.75

"PAPCO" HEXAGON NUTS



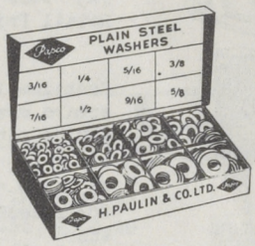
Assortment N-400
400 Hexagon Nuts, fine, coarse and castellated types. 18 sizes. Net Price $7.60

S.A.E. STEEL WASHERS



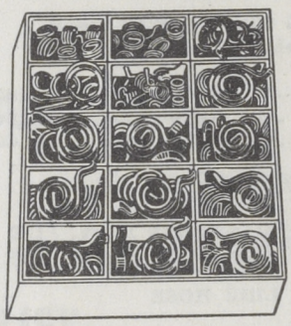
Assortment No. W-80
370 S.A.E. Washers in sizes from 3/16" to 5/8"
Retail Price $3.25

"PAPCO" PLAIN STEEL WASHERS



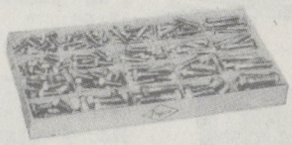
Assortment W-575
5 lb. Plain steel Washers in sizes from 3/16" to 5/8"
Retail Price $2.90

DOOR LOCK SPRINGS



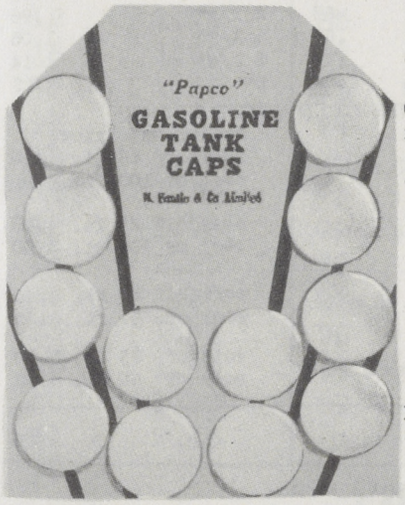
Assortment No. LS-81
81 Door Lock Springs. 21 sizes. Retail Price $9.75

"PAPCO" CAP SCREWS



Assortment No. CS-250
Fine Thread
Assortment No. CS-255
Coarse Thread
250 Hexagon Head Cap Screws 18 Sizes. Net Price: $7.60

Rad and Gas Cap Displays



No. 2050
This attractive display contains 12 Polished Gas Tank Caps to service all popular makes of cars.
9-2020 Caps for 1⅛ Spout.
3-2010 Caps for 1 7/8 Spout.
Retail Price $5.40

No. TC-26
This attractive display contains 12 Under-Hood type Radiator Caps.

3-No. TC-65	2-No. TC-67
5-No. TC-68	2 No. TC-69

Retail Price $2.60

Cap Screw and Nut Assortments

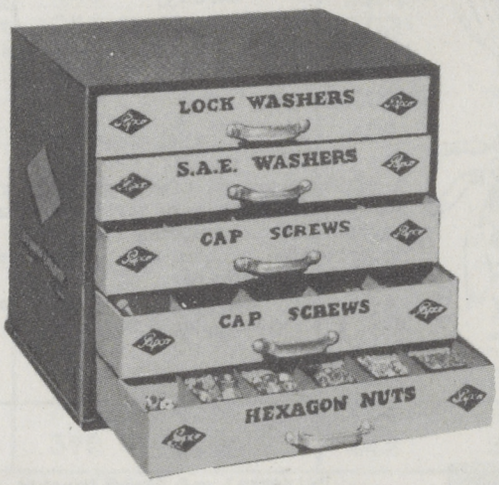


Dealer Service Assortment No. DSS-53
Contains 1000 Cap Screws and 650 Hex Nuts in fine and coarse threads in these sizes.
Net Price: $38.00

1/4 x 1/2	5/16 x 1/2	3/8 x 3/4	7/16 x 1 1/4
1/4 x 3/4	5/16 x 3/4	3/8 x 1	7/16 x 1 1/2
1/4 x 1	5/16 x 1	3/8 x 1 1/4	7/16 x 2
1/4 x 1 1/4	5/16 x 1 1/4	3/8 x 1 1/2	1/2 x 1
1/4 x 1 1/2	5/16 x 1 1/2	3/8 x 2	1/2 x 1 1/4
1/4 x 2	5/16 x 2	7/16 x 1	1/2 x 1 1/2
			1/2 x 2

Hexagon Nuts in S.A.E. , U.S.S. and Castellated Types.
1/4, 5/16, 3/8, 7/16, 1/2 and 9/16.

Dealer Service Assortments



All Single Drawer Assortments. Per Drawer Net: $7.60
Metal Cabinet supplied free with purchase of 5 Assortments.

SHEET METAL SCREWS. No. DSS 32 OVAL HEAD (Self-Tapping)
CONTENTS--610 Screws--15 Sizes.

4 x 1/2	6 x 1	8 x 1	10 x 3/4	10 x 1 1/2
6 x 1/2	8 x 1/2	8 x 1 1/2	10 x 1	14 x 3/4
6 x 3/4	8 x 3/4	10 x 5/8	10 x 1 1/4	14 x 1

STOVE BOLTS. ROUND HEAD. No. DSS 25.
CONTENTS-500 Bolts and Nuts-13 Sizes.

3/16 x 1/2	3/16 x 1 1/2	1/4 x 1/2	1/4 x 1 1/2
3/16 x 3/4	3/16 x 1 3/4	1/4 x 3/4	1/4 x 1 3/4
3/16 x 1	3/16 x 2	1/4 x 1	1/4 x 2

SPRING CENTER BOLTS--FILISTER AND SQUARE HEAD---No. DSS 23.
CONTENTS-65 Bolts and Nuts-12 Sizes.

CB-51	CB-54	CB-56	CB-58X	CB-46	CB-72
CB-52	CB-55	CB-58	CB-45	CB-71	CB-75

These are only a few of the Drawer Assortments we carry in stock. Others include such items as, Machine Screws, Lock Washers, Hexagon Cap Screws etc.
For further particulars, please write.
D. ACKLAND & SON WINNIPEG, MANITOBA.



No. 0 Kit TUBE REPAIR KITS
Contains 24 sq. in. of repair material and a ¾x3" tube of patching cement.
Retail Price; .29



COMMERCIAL REPAIR KIT
Contains 150 sq. in. repair material 100-1¼" square ready cut bevelled patches and ¼ pint tin of patching cement. Retail price; 2.75



No. 1429-"CLING CEMENT"
For attaching rubber to rubber, leather, wood etc.
Retail Price;

¼ pint cans	.47	Quart cans	1.65
½ pint cans	.70	Gallon cans	5.25
Pint cans	1.00	5 Gallon cans	25.50

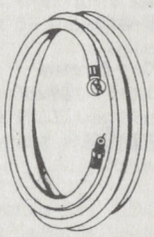


No. 1311-AIR DRYING COLD PATCHING CEMENT
For cold patch repairs.
Retail Price;

¾"x4" Tubes	.15	Pint cans	.80
1"x5" "	.20	Quart cans	1.25
½ pint cans	.45	Gallon cans	3.80

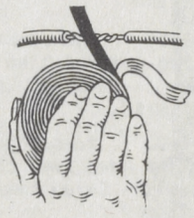


FRICTION TAPE
Retail Price;
Std. ¾" Wide No. 2 Rolls length 13 ft. .20
Std. ¾" Wide No. 8 Rolls length 60 ft. .65



AIR LINE HOSE

Dealer Net Price	per length
¼" I.D. with fittings 25 foot lengths	7.23
¼" I.D. " " 50 " "	13.73
⅜" I.D. " " 25 " "	8.39
⅜" I.D. " " 50 " "	15.55
¼" I.D. without fittings 25 foot lengths	6.00
¼" I.D. " " 50	12.00
⅜" I.D. " " 25	7.16
⅜" I.D. " " 50	14.32



SPLICING COMPOUND

A rubber compound tape developed specially for electrical repair work. Used next to copper wire it replaces insulation that has deteriorated or torn off. Ideal for quick on the spot repairs.

	Retail Price
Std. ⅝ " width--No. 8 Rolls	.65



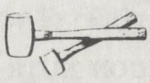
1245-QUICK CURE VULCANIZING CEMENT
Black quick cure cement for use with G.P. No. 1245 Repair Gum.
Dealer Net Price; Pint Cans .50 ea.
Quart Cans .75 ea.



No. 1245-QUICK CURE TUBE REPAIR GUM
Black repair gum for inner tube repairs.
Dealer Net Prices;
1 lb. Rolls 5" wide 1.50
1 lb. cartons in 1" wide strips 1.50



TALC
A smooth high grade Talc that neutralizes friction, thereby minimizing heat build-up.
Dealer Net Prices;
1⅝"x7" sifter top tins .30
5lb. sacks .12 lb.

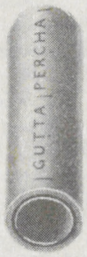


MALLETS
Rubber Head, Wooden.
Retail Price;
No. 1 Including wooden handle .90
No. 2 " " " 1.80



OVAL PULLED CORD PATCHES
Retail Price;

No. 1 4"x5"	.10	No. 4 9"x12"	.30
No. 2 6"x8"	.15	No. 5 10"x15"	.40
No. 3 7½"x10½"	.25		



RADIATOR HOSE-STRAIGHT TYPE
3 Ply Construction

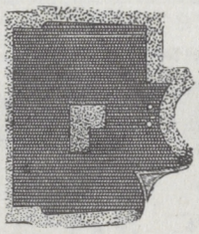
List Price		List Price	
1"	.50	1 3/4"	.80
1 1/8"	.54	1 7/8"	.84
1 1/4"	.59	2"	.89
1 5/16"	.60	2 1/8"	.92
1 3/8"	.62	2 1/4"	.96
1 7/16"	.66	2 1/2"	1.05
1 1/2"	.71	2 3/4"	1.14
1 5/8"	.75	3"	1.23

WINDSHIELD WIPER TUBING



	Dealer Net Price;
⅛" x ⅛" wall, all rubber	coil of 25 ft. .90 reel of 100 ft. 2.65
⅛" x ⅛" wall, all rubber	coil of 25 ft. 1.00 reel of 100 ft. 3.00
¼" x 3/32" wall, all rubber	coil of 25 ft. 1.40 reel of 50 ft. 2.35
7/32" I.D. reinforced, one braid	coil of 25 ft. 2.60 reel of 50 ft. 4.75

MOTOR CAR MATS



Universal and Ready Punched types

Long wearing Motor Car Mats with an easy to clean pattern and a thich cushion of felt on the back to keep out drafts, dust, heat in summer and cold in winter and seal all board openings. Universal types make it possible to fit most cars. Holes are unpunched in Nos. 1 to 6.

Universal Mats

Mat No.	Dimensions Top	Bottom	Depth	Retail Price
1, Front	34	40	34	3.70
2, Front	39½	43	39	4.30
3, Front and Rear	47	47	32	4.30
4, Rear	47	47	40	4.75
5, Rear	50	50	37	5.35
6, Rear	60	60	37	6.40

SPECIAL MATS

Mat No.	Dimensions Top	Bottom	Depth	Retail Price
C29F-Chevrolet 1929-31 Front	32	41¼	40¾	4.00
C32F-Chevrolet 1932 Front	33⅛	39¾	32	4.00
C33F-Chevrolet 1933-34 Front	35⅛	41¾	36½	4.30
C35F-Chevrolet 1935-36 Front	35¾	44¼	39¼	4.45
C37F-Chevrolet 1937-38 Front	38½	47	39	4.65
C39F-Chevrolet 1939 Front	38	46¼	32½	4.65
F28F-Ford A 1928-31 Front	31	37¾	32¾	3.60
F32F-Ford B&V8 1932 Front	34½	39	32¾	3.70
F-33F-Ford V8 1933-34 Front	33	39¾	36¼	3.85
F35F-Ford V8 1935 Front	40½	44	36	4.45
F36F-Ford V8 1936 Front	39	46½	35½	4.45
F37F-Ford V8 1937-8-9 Front	35¼	48¼	38	4.65
DP33F-Dodge 1933-34 Front	33½	41⅝	36¼	4.00
DP33F-Plymouth 1933-34 front	33¾	41¾	36¼	4.45
DP35F-Dodge 1935 Front	35¼	45½	36	4.45
DP35F-Plymouth 1935 Front	35¼	45½	36	4.45
DP36F-Dodge 1936 Front	32	46¼	36½	4.45
DP36F-Plymouth 1936 Front	32	46¼	36½	4.45
DP37F-Dodge 1937-38 Front	37½	48	36	4.65
DP37F-Plymouth 1937-38 Front	37⅛	48	36	4.65
DP39F-Dodge 1939 Front	37¼	46¾	37	4.65
DP39F-Plymouth 1939 Front	37¼	46¾	37	4.65

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

GUTTA PERCHA

TIRE RELINERS
Cement Coated



Passenger Type			Truck Type		
Group	Tire Size	Retail Price	Group	Tire Size	Retail Price
No. 1	30 x 3½	2.27	No. 8A, 4 ply	30 x 5	2.62
No. 2	4.40, 4.50-21	2.27	No. 8B, 6 ply	30 x 5	3.70
No. 3	4.50, 4.75, 5.00-20, 4.75, 500-19	2.27	No. 9A, 4 ply	32 x 6, 6.00-20, 6.50-20	2.65
No. 4	5.25, 5.50-18	2.27	No. 9B, 6 ply	32 x 6, 6.00-20, 6.50-20	3.75
No. 5	5.25 5.50-17	2.27	No.10 6 ply	34 x 7, 7.00-20, 7.50-20	4.65
No. 6	5.25, 5.50-19, 20, 21, 6.00, 6.50-17		No.11 6 ply	8", 8.25	7.19
	6.50, 6.50-18, 19, 20, 21.	2.27	No.12 6 ply	9", 9.00, 9.75, 10.00	8.75
No. 7	5.50, 6.00, 6.25, 6.50-16	2.27			

"V" TYPE FAN BELTS





PRICE LIST

No.	List Price	No.	List Price	No.	List Price	No.	List Price	No.	List Price
7	1.40	63	2.15	101	1.85	252	2.35	383	4.25
10	1.55	64	1.65	106	1.65	254	1.85	386	6.70
12	1.75	65	1.85	108	1.75	257-H	5.25	402	2.25
16	1.50	67	1.35	111	1.50	258	3.90	404	1.60
17	1.35	70	2.00	113	1.60	262	1.50	406-H	3.50
18	1.50	74	6.45	115	1.60	264	3.75	407	1.60
19	1.55	75	2.15	122	2.40	321	2.95	408	2.55
31	1.75	76	1.80	126	6.95	324	3.30	412	2.75
32	1.75	77	1.90	127	2.10	325	4.65	414-H	4.45
33	2.25	79	2.45	144	1.30	331	3.25	415-H	7.05
39	1.60	92	1.60	145	2.60	332	6.55	416	1.90
53	1.75	96	1.85	148	1.75	343	3.75	419	5.00
58	1.80	97	1.50	158-H	3.56	362	4.25	420	6.80
60	1.80	99	1.75	159-H	5.30	368	4.50	423	4.70
61	2.45					370	2.95	442	3.95

Passenger Car Fan Belt Application

MAKE AND YEAR	MODEL	BELT NUMBERS
BUICK		
1934-36	40 Series (FG)	92
1936-38	60, 80, 90 Series (FG)	75
1937-39	40 Series (FG)	92
1939	60, 80, 90 Series (FG)	75
1940	60, 70, 80, 90 Series (FG)	122
1940	40, 50 Series (FG)	416
1941-46	40, 50 Series (FG)	60
1941-46	60, 70, 90 Series (FG)	61
1946-47	40, 50 Series Police Cars (FG)	343
1946-47	70 Series Police Cars (FG)	33
1947-49	40, 50 Series (FG)	60
1947-49	70 Series (FG)	61
1950	40, 50 Series (FG)	442

MAKE AND YEAR	MODEL	BELT NUMBERS
CHEVROLET		
1926-28	All	7
1929-32	6 Cyl. (FG)	17
1933-34	Std., 6 Cyl. (FG)	64
1933-34	Master, 6 Cyl., CA, DA (FG)	67
1935-36	Std. and Master, 6 Cyl. (FG)	67
1937-47	All police car models, equipped with mobile 2-way radio	64
1937-50	All Models	18
CHEVROLET (Army)		
1940	KB, Sedan, 4 x 2	18
1942	BG-1503, Sedan 4 x 2	18

Passenger Car Fan Belt Application Cont'd

MAKE AND YEAR	MODEL	BELT NUMBERS
CHRYSLER		
1932-33	CI, CO, 6 Cyl. (FG)	108
1932-34	CP, CQ, CT, CU, CV, CX, Airflow, Imp., Royal, 8 Cyl.	416
1932-34	CL, CW, Imp., Imp. Cust., 8 Cyl. (FG)	122
1934	CY, Airflow, 6 Cyl. (FG)	108
1934-35	CA, CB, C6, 6 Cyl.; CZ Little Eight (FG)	60
1935-36	C1, C2, C3, C9, C10, C11, Airflow, 8 Cyl. (FG)	416
1936	C7, Airstream, 6 Cyl., State Police Radio Cars (FG)	63
1936	C7, C8, Airstream, City Police Radio Cars (FG)	115
1936	C7, Airstream, 6 Cyl. (FG)	115
1936	C8, Airstream, 8 Cyl. (FG)	60
1937	C14, C15, C16 (FG)	60
1937	C17, Airflow, 8 Cyl. (FG)	416
1938	C20, 8 Cyl. (FG)	60
1938-39	C18, C22, 6 Cyl. (FG)	60
1938-40	C19, C23, C26, C27, 8 Cyl. (FG)	115
1940-42	C25, C28, C34, 6 Cyl.; C30, C33, C36, C37, 8 Cyl. (FG)	60
1946-50	C38, 6 Cyl.; C39, 8 Cyl. (FG)	60
1949-50	C46N, C46K, C49, 8 Cyl. (FG)	60
1949-50	C45S, C45W, C48, 6 Cyl. (FG)	60
DE SOTO		
1935	SF, 6 Cyl. (FG)	60
1936	S1, Airstream, 6 Cyl., State Police Radio Cars (FG)	423
1936	S1, Airstream, 6 Cyl. (FG)	115
1937	S3 (FG)	60
1938-48	All Models	60
1949-50	S13, S14, 6 Cyl. (FG)	60
DODGE		
1932-33	DK, DO, 8 Cyl. (FG)	416
1932-34	DL, 6 Cyl. (FG)	31
1933-37	DP, DR, DS, DT, DU, DV, D2, D3, D4, D5, 6 Cyl. (FG)	60
1936	D2, Airstream, 6 Cyl., Police Radio Cars (FG)	115
1938-41	D8, D11, 6 Cyl. (FG); D14, D17; D19 to Engine No. 9208	60
1941-42	D19, After Engine No. 9208, D22	60
1946-48	D24, Cust., D24 DeL. (FG)	60
1949-50	D30, D33, D34, 6 Cyl. (FG)	60
FORD-METEOR		
1928-32	A, B, 4 Cyl.	18
1932	18, 8 Cyl. (FG)	58
1933	46, 4 Cyl. (FG)	18
1933-36	18, 40, Improved 40, 48, 68, 8 Cyl. (FG)	65
1937	Police Scout Cars with Delco-Remy Gen. (FG)	96
1937-38	78, 81A, Std. and DeL., 8 Cyl. 85 H.P. Mtr. (FG)	58
1937-39	74, 82A, 922A, 8 Cyl. 60 H.P. Mtr. (FG)	106
1939	91B, DeL. 85 H.P. Mtr.; 99, Mercury, 95 H.P. Mtr. (FG)	96
1939-40	91A, 01A, Std., 85 H.P. Mtr.; 09A, Mercury, 95 H.P.	58
1940	022A, 60 H.P. Mtr. (FG)	106
1940(Late)	022A, 60 H.P. Mtr. with 3" Fan Pulley (FG)	331
1940(Late)	01A, 85 H.P. Mtr.; 09A, Mercury, 95 H.P. Mtr. with 3"	96
1941	11A, 85 H.P. Mtr.; 19A Mercury, 95 H.P. Mtr.	96
1941	1GA, 90 H.P., 6 Cyl. (G)	262
1941	1GA, 90 H.P., 6 Cy. (W.P.)	144
1942	21A, 90 H.P.; 29A, 100 H.P., 8 Cyl. (F)	19
FORD-METEOR (Cont'D)		
1942	21A, 90 H.P.; 29A, 100 H.P., 8 Cyl. (G)	96
1942	2GA, 90 H.P., 6 Cyl. (G)	10
1942	2GA, 90 H.P., 6 Cyl. (W.P.)	145
1946	All Models, 6 Cyl. (G)	10
1946	All Models, 6 Cyl. (W.P.)	145
1946	All Models, 8 Cyl. (F)	19
1946	All Models, 8 Cyl. (G)	96
1947	79A, 79M, 100 H.P., 8 Cyl. (F)	19
1947	79A, 79M, 100 H.P., 8 Cyl. (G)	96
1947	7GA, 90 H.P., 6 Cyl. (W.P.)	145
1947	7GA, 90 H.P., 6 Cyl. (G)	10
1947-48	6 Cyl. (FG)	264
1948-49	6 Cyl. (Late) (FG)	402
1948	8A, 8 Cyl. (Fan)	19
	8A, 8 Cyl. (Gen. and W.P.)	76
1949	8BA, 8 Cyl. (Fan)	19
	8BA, 8 Cyl. (Gen. and W.P.)	76
1949	All 6 Cyl. Models with Spec. Gen.	406H
1950	All Models (FAN)	402
1950	All Models (GEN)	408
HUDSON		
1935	GH, 6 Cyl. (High Compression Head)	383
1936-47	All Models	92
1948-50	All Models	31
MERCURY-MONARCH		
1939	V8, 95 HP, 99A	96
1940	09-A, 95 HP	58
1941	19A, 95 HP	96
1942-49	All (F)	19
1942-48	All (G. & W.P.)	96
1949	All (G. & W.P.)	76
1950	All (F)	402
1950	All (G. & W.P.)	408
NASH		
1933	1120 Big 6 Cyl.; 1130 Std., 8 Cyl. (FG)	63
1933	1170 Spec., 8 Cyl. (FG)	416
1934-37	1220 Big 6 Cyl.; 3520, Adv., 6 Cyl.; 3620, 3640, 6 Cyl. (FG)	416
1934-39	1280, 3580, Adv., 3590, 3680, 3780, 3880, 3980,	254
1938-39	3820, 3920, Amb., 6 Cyl. (FG)	254
1940	4020 Amb., 6 Cyl.; 4080 Amb., 8 Cyl.	254
1941-42	4160, 4260, Amb., 6 Cyl.	32
1941-42	4180, 4280, Amb. 8 Cyl.	362
1941-42	4140, 4240, Amb. "600"	32
1941-49	600, 40 Series (FG)	32
1941-49	Amb. 60 Series (FG)	32
1950	Amb. 60 Series, Statesman 40 (F.G.),	32
1950	Statesman 40 Series (All C A N.—Late American)	402
OLDSMOBILE		
1933-35	F33, 6 Cyl., L33, L34, L35, L36, 8 Cyl. (FG)	63
1934-36	F34, F35, F36, 6 Cyl. (FG)	416
1937-47	All Models	101
1948	66, 76, 6 Cyl.; 68, 78, 8 Cyl. (FG)	101
1948	98, 8 Cyl. (FG)	258
1949-50	88, 98, 8 Cyl. (G)	404
	88, 98, 8 Cyl. (F) Produced thru 6/15/49	31
	88, 98, 8 Cyl. (F) Produced after 6/15/49	407
	76, 6 Cyl. (FG)	258

EVERY ORDER IS A RUSH ORDER WITH US.

Passenger Car Fan Belt Application Cont'd

MAKE AND YEAR	MODEL	BELT NUMBERS
PACKARD		
1933-36	1001-2-3-4, 1103-4-5, 1203-4-5, 1403-4-5, Super, 8 Cyl.	111
1933-36	1005-6-7-8, 1106-7-8, 1206-7-8, 1406-7-8, Twin, 6 Cyl.	115
1934-36	1100-1-2, 1200-1-2, 1400-1-2, Std., 8 Cyl. (FG)	111
1935-37	115, 6 Cyl., 120, 120C, 8 Cyl. (FG)	92
1937	1506-7-8, 12 Cyl.	115
1937-39	1500-1-2; 1603-4-5, 1703-4-5, Super, 8 Cyl. (FG)	122
1938-39	1607-8; 1707-8, 12 Cyl. (FG)	115
1938-42	1600, 1700, 1800, 110, 6 Cyl.; 1601-2, 1701-2, 1801-01A	60
1940-46	1803-3A-4-5-6-7-8, 160, 180, Super. and Cust. Super, 8	74
1946-47	Clipper 8 Cyl., 2010-11 (FG)	60
1947	Clipper 6 Cyl., 2100-30 (FG)	60
1947	Super Clipper, 8 Cyl., 2103-06	74
1947	Custom Super Clipper, 8 Cyl., 2126	74
1948	2220, 2240, Six Cyl. (FG)	60
1948	2240, Six Cyl., 2201, 2211, Eight Cyl. (FG)	60
1948-50	2202, 2222, 2232, 2262-2265, 2362-2365, Super 8	60
1948-50	2206, 2213, 2226, 2233, 2252, 2352, Custom 8 (FG)	74
PLYMOUTH		
1931-32	PA, PB, Floating Power (FG)	416
1933	PC Std., PD DeL. (FG)	60
1934	PF Std., PG (Radio Equipped) (FG)	60
1934-36	PF Std., PG (Radio Equipped), PE DeL., PJ DeL., Air Stream (FG)	60
1936	P1, P2, Airstream Police Radio Cars (FG)	115
1937	P3, P4 (FG)	60
1937	State Police Radio Cars (FG)	115
1937	City Police Radio Cars (FG)	60
1937-40	P5 Std., P6 DeL., P7 Road King, P 8 DeL., P9, P10	60
1941-42	All Models	80
1946-50	All Models	60

MAKE AND YEAR	MODEL	BELT NUMBERS
PONTIAC		
1932	8 Cyl. (FG)	60
1932	6 Cyl. (FG)	324
1933-36	All Models	12
1937-48	All Models (Except with Police Gen.)	254
1948	All Models with Police Gen.	60
1949-50	P6, 6 Cyl.; P8, 8 Cyl. (FG)	32
STUDEBAKER		
1934	A, Dictator, 6 Cyl. (FG)	60
1934-37	B, 1B, Commander; C, 1C, 2C, 3C, President (FG)	99
1935	1A, 2A, Dictator (FG)	60
1936-39	3A, 5A, 6A, Dictator, 7A, 8A, President, 9A, Commander, 5C, President, 8 Cyl. (FG)	99
1939-40	G, 2G, Champion (FG)	97
1940-42	10A, 11A, 12A, Commander; 6C, 7C, 8C, President,	99
1941-46	3G, 4G, 5G, Champion (FG)	97
1947-50	Commander (FG)	108
1947-50	Champion (FG)	16
TERRAPLANE		
1934	KU, (116" WB); K, Super Power, 6 Cyl. (FG)	60
1934-35	Challenger Six (High Compression Head); G Spec., (High Compression Head)	383
1934-35	Challenger Six (Std. Head); K (Std. Head) (112" WB); GU DeL. 6 Cyl. (FG)	416
1936-38	All Models	92

English Car Fan Belt Application Cont'd

MAKE AND MODEL	YEAR AND DESCRIPTION	BELT NUMBERS
AUSTIN		
1932-47	10 HP	64
1934-36	Light 12/4	64
1931-37	12/6	64
1937	14 HP	18
1938-40	14 HP	64
1935-37	16 HP	64
1934-40	18 HP	64
1946-47	12 HP	18
1939-47	8 HP	9
1937-47	Big 7—8 HP	21
1945	8 HP Van	194
1947-50	A40 Devon & Dorset	282
1948	A125 A135	92
1949-50	A125 A135	286
1948	25 cwt. Van	180
1948-50	A70 A90	180
FORD		
1928-34	A, AA, B, BB, 4 cyl.	18
	A11 14.9 and 24 HP	18
1932-33	8 HP	17
1938	8 HP 10 HP early	17
1945-47	10 HP Van	194
1945-49	Prefect 10 HP with pump	194

MAKE AND MODEL	YEAR AND DESCRIPTION	BELT NUMBERS
FORD (Con't)		
1939-49	Prefect 10 HP without pump	185
1939-49	Anglia without water pump	185
1948-49	Anglia with water pump	194
1948-49	Pilot 3.6 litre	58
1948-49	Thames 5 & 10 cwt. Van	185
1948-49	Thames 5 & 10 cwt. Van with water pump	194
HILLMAN		
1933-34	Wizard	7
1932-38	Minx	64
1938-41	14 HP	18
1933-35	16 HP & 20 HP	7
1936-37	16 HP Hawk 80	9
1940-48	Without heater	286
1948	With heater	115
1949	Minx (Fan)	192
	Minx (Gen)	245
MORRIS		
1935	8 HP	9
	Series E 8 HP	7
1936-39	Series I 8 HP	32
1940-48	Series E 8 HP	16
1949	"21"	7

English Car Fan Belt Application Cont'd

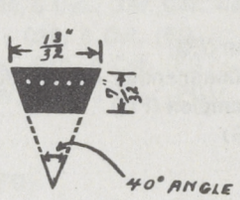
MAKE AND MODEL	YEAR AND DESCRIPTION	BELT NUMBERS
MORRIS (Cont'D)		
	Series I and II 8 HP	9
1949-50	Minor	289
1949-50	Oxford	288
STANDARD AND VANGUARD		
1937-40	9 HP—10 HP	12
1946-48	9 HP—10 HP	12
1949-50	8 HP	32
1949-50	12/14 HP	32
1931-40	16 HP 20 HP	177
STANDARD AND VANGUARD (Cont.)		
1934-35	9 HP	177
1934-36	10 HP	177
1934-40	12 HP	177
1936-40	14 HP	177
1946-48	8 HP 12 HP 16 HP	177
1948-49	Vanguard	177
VAUXHALL		
1948-49	Vilox	8

STANDARD F.H.P. "V" BELTS

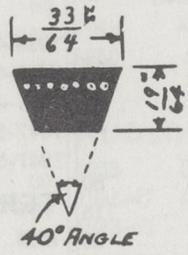
GET IT FROM YOUR JOBBER

These Standard Sizes are Carried in Stock. Most Manufacturers Duplicate These Sizes In Their Standard Stock Lines

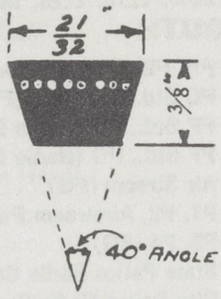
NO. 0 SECTION



NO. 1 SECTION



NO. 2 SECTION



DIMENSIONS

PRICES ON APPLICATION

NO. 0 SECTION BELTS

(Nos. 0170 to 0430)

Belt Thickness 7/32"

Belt No.	O.C	I.C.	Top Width	Angle
0170	17"	15 5/8"	13/32"	40 deg.
0180	18"	16 5/8"	"	"
0190	19"	17 5/8"	"	"
0200	20"	18 5/8"	"	"
0210	21"	19 5/8"	"	"
0220	22"	20 5/8"	"	"
0230	23"	21 5/8"	"	"
0240	24"	22 5/8"	"	"
0250	25"	23 5/8"	"	"
0260	26"	24 5/8"	"	"
0270	27"	25 5/8"	"	"
0280	28"	26 5/8"	"	"
0290	29"	27 5/8"	"	"
0300	30"	28 5/8"	"	"
0310	31"	29 5/8"	"	"
0320	32"	30 5/8"	"	"
0330	33"	31 5/8"	"	"
0340	34"	32 5/8"	"	"
0350	35"	33 5/8"	"	"
0360	36"	34 5/8"	"	"
0370	37"	35 5/8"	"	"
0380	38"	36 5/8"	"	"
0390	39"	37 5/8"	"	"
0400	40"	38 5/8"	"	"
0410	41"	39 5/8"	"	"
0420	42"	40 5/8"	"	"
0430	43"	41 5/8"	"	"

NO. 1 SECTION BELTS

(Nos. 1200 to 11000)

Belt Thickness 19/64"

Belt No.	O.C.	I.C.	Top Width	Angle
1200	20"	18 1/8"	33/64"	40 deg.
1210	21"	19 1/8"	"	"
1220	22"	20 1/8"	"	"
1230	23"	21 1/8"	"	"
1240	24"	22 1/8"	"	"
1250	25"	23 1/8"	"	"
1260	26"	24 1/8"	"	"
1270	27"	25 1/8"	"	"
1280	28"	26 1/8"	"	"
1290	29"	27 1/8"	"	"
1300	30"	28 1/8"	"	"
1310	31"	29 1/8"	"	"
1320	32"	30 1/8"	"	"
1330	33"	31 1/8"	"	"
1340	34"	32 1/8"	"	"
1350	35"	33 3/8"	"	"
1360	36"	34 1/8"	"	"
1370	37"	35 1/8"	"	"
1375	37 1/2"	35 5/8"	"	"
1380	38"	36 1/8"	"	"
1390	39"	37 1/8"	"	"
1400	40"	38 1/8"	"	"
1410	41"	39 1/8"	"	"
1420	42"	40 1/8"	"	"
1430	43"	41 1/8"	"	"
1440	44"	42 1/8"	"	"
1450	45"	43 1/8"	"	"
1460	46"	44 1/8"	"	"
1470	47"	45 1/8"	"	"
1475	47 1/2"	45 5/8"	"	"
1480	48"	46 1/8"	"	"
1490	49"	47 1/8"	"	"
1500	50"	48 1/8"	"	"
1520	52"	50 1/8"	"	"
1530	53"	51 1/8"	"	"
1540	54"	52 1/8"	"	"

NO. 2 SECTION BELTS

(Nos. 2250 to 21000)

Belt Thickness 24/64"

Belt No.	O.C.	I.C.	Top Width	Angle
2250	25.3"	23"	21/32"	40 deg
2260	26.3"	24"	"	"
2270	27.3"	25"	"	"
2280	28.3"	26"	"	"
2290	29.3"	27"	"	"
2300	30.3"	28"	"	"
2310	31.3"	29"	"	"
2320	32.3"	30"	"	"
2330	33.3"	31"	"	"
2340	34.3"	32"	"	"
2350	35.3"	33"	"	"
2360	36.3"	34"	"	"
2370	37.3"	35"	"	"
2380	38.3"	36"	"	"
2390	39.3"	37"	"	"
2400	40.3"	38"	"	"
2410	41.3"	39"	"	"
2420	42.3"	40"	"	"
2430	43.3"	41"	"	"
2440	44.3"	42"	"	"
2450	45.3"	43"	"	"
2460	46.3"	44"	"	"
2470	47.3"	45"	"	"
2480	48.3"	46"	"	"
2490	49.3"	47"	"	"
2500	50.3"	48"	"	"
2520	52.3"	50"	"	"
2530	53.3"	51"	"	"
2540	54.3"	52"	"	"
2560	56.3"	54"	"	"
2570	57.3"	55"	"	"
2580	58.3"	56"	"	"

OUR SALESMEN GET CREDIT FOR ORDERS YOU PHONE OR MAIL.

DOR-TITE

The original self-sealing sponge rubber weatherstrip with patented fabric base

DOR-TITE is extra live sponge rubber reinforced with tough fabric material. One side is surfaced with a special adhesive for sticking to glass, wood, metal and other surfaces. Holland cloth protects the adhesive side, and keeps it tacky until applied.

DOR-TITE cannot stretch—the patented fabric base prevents stretching—and adds greatly to the gripping power.

DOR-TITE readily compresses (see illustration below). For an air-tight seal Dor-Tite should be slightly compressed when in use.

DOR-TITE prevents rattles and eliminates squeaks. Doors that ordinarily shut with a noisy bang close with smooth quietness. This soft sponge rubber absorbs all shock and prevents direct contact of wood or metal.

DOR-TITE for the CAR

WEATHERSTRIPS **ELIMINATES RATTLES**

CAR DOORS—DOR-TITE in two thicknesses at least—sometimes three—is required to properly service car doors, since the openings around the doors vary from 1/8" to nearly 1/2".

HOOD LACING AND SILENCER—DOR-TITE is applied after the old lacing has been removed, and the surface cleaned with gasoline to remove all grease.

VENTILATORS—DOR-TITE is unexcelled as a gasket for ventilators. Eliminates noise—makes a water and dust-proof seal.

LUGGAGE COMPARTMENTS — DOR-TITE makes the luggage compartment dust-proof—keeps it clean and dry.

Also—Windows, Convertible Tops, Refrigerated Trucks

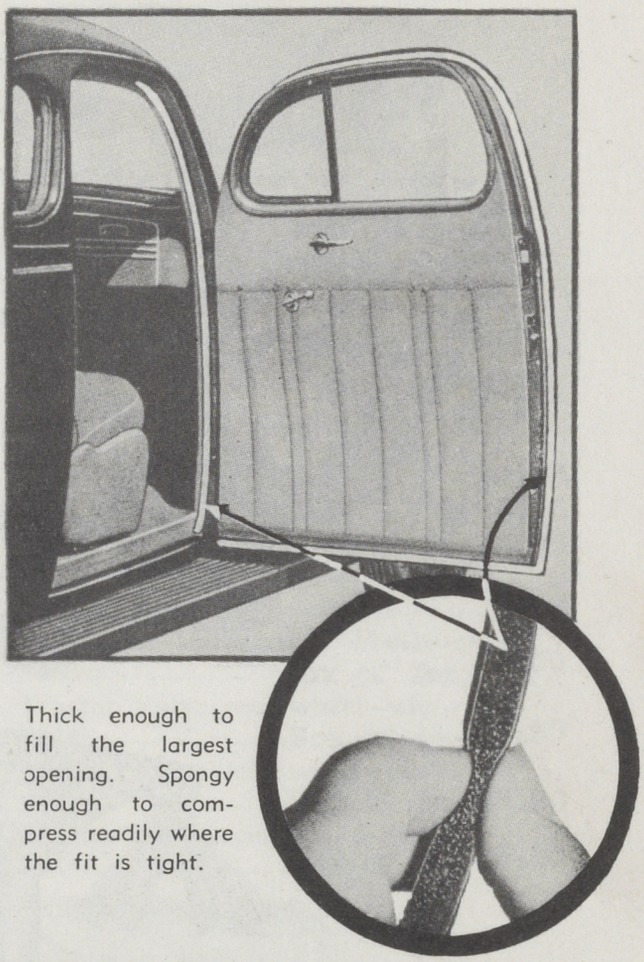
DOR-TITE for the HOME

WEATHERSTRIPS **ELIMINATES RATTLES** **KEEPS OUT DUST**

WINDOWS—Sash and Casement—DOR-TITE is the perfect weatherstripping—adheres to cement, wood, metal, glass, etc.

DOORS—DOR-TITE prevents drafts and rattles.

REFRIGERATORS—DOR-TITE applied around refrigerator doors makes an air-tight seal.



Thick enough to fill the largest opening. Spongy enough to compress readily where the fit is tight.



CONSUMER SIZE CARTONS

LIST PRICES

3/8" Wide Thickness	10' Carton	3/4" Wide Thickness	10' Carton
5/32"	50c	5/32"	——
5/16"	55c	5/16"	95c
7/16"	70c	7/16"	$1.15

SHOP SIZE CARTONS

LIST PRICES

3/8" Wide Thickness	50' Carton	100' Carton	3/4" Wide Thickness	25' Carton	50' Carton
5/32"	——	$4.50	5/32"	——	$4.28
5/16"	——	5.00	5/16"	——	4.75
7/16"	$3.15	——	7/16"	$3.00	——

D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

SHALER

Shaler Streamliner "Hot Patches"





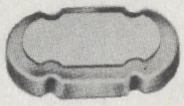






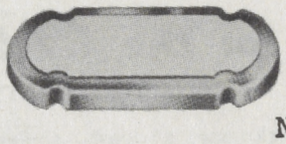
No. 6, Round, "Hot Patches", 1¾ inches diameter. **Net**

M-6 Pkg. of 10 Units 1.10
G-6 Pkg. of 50 Units 2.85



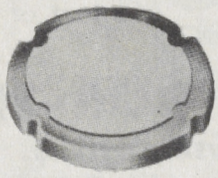
No. 7, Oblong, "Hot Patches", 1⅜ x 2¼ inches. **Net**

M-7 Pkg. of 10 Units 1.10
G-7 Pkg. of 50 Units 2.85



No. 8, Extra-Long, "Hot Patches", 1¾ x 4 inches. **Net**

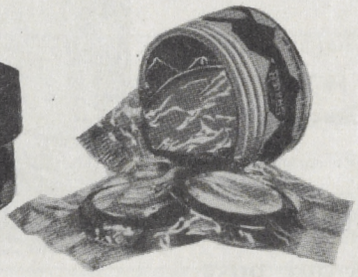
G-8 Pkg. of 25 Units 2.85



No. 9, Large-Round, "Hot Patches", 3 inches in diameter. **Net**

G-9 Pkg. of 25 Units 2.85





Shaler M-50 Emergency Kit

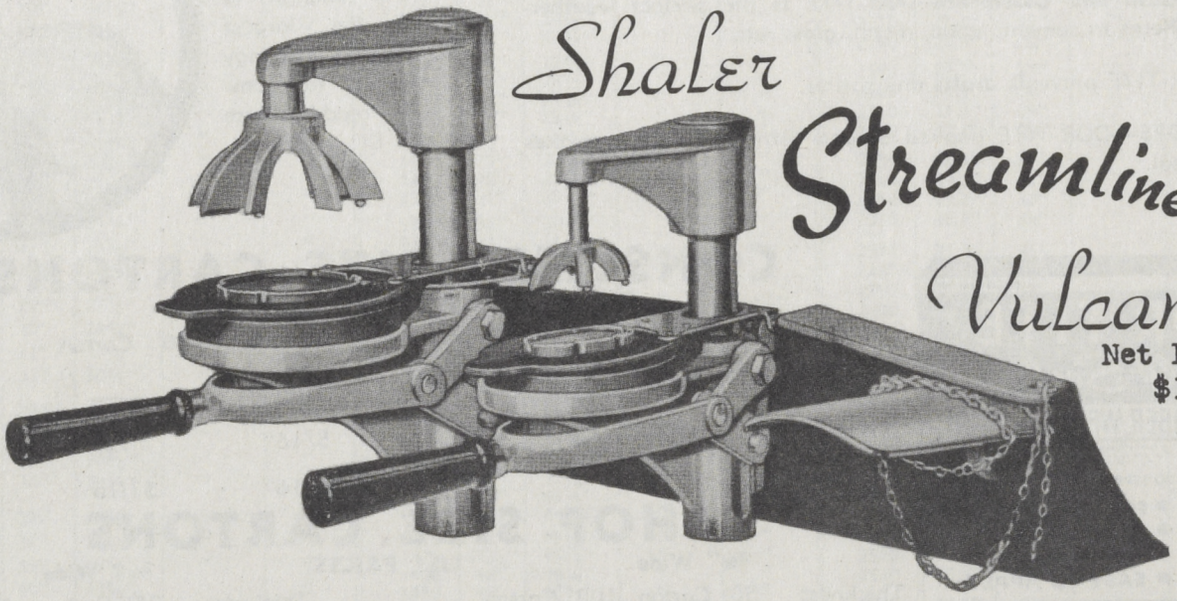
Retail Price; 1.10

The compact M-50 Emergency Kit has been developed especially for carrying in the tool kit as "roadside flat" insurance for those motorists who make long trips or prefer the side roads to the heavy traffic highways.

The M-50 Kit consists of a black **enameled** pressure clamp with a recessed **base** into which is screwed a damp-proof **can** holding 3 Shaler Streamliner "Hot Patches" and a tube roughener. There is little danger of mislaying the box of patches as it serves as a support for the clamp while the repair is being made.

The standard package is 12 M-50 Kits in a carton, shipping weight 15 lbs.

Shaler Streamliner Vulcanizer

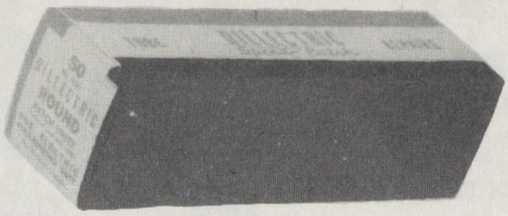


Net Price $18.80

Completely NEW in Design and Construction

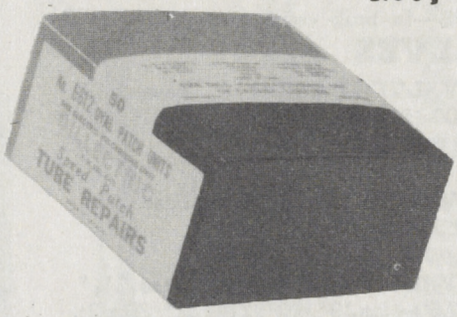
YOU CAN BE SURE WITH PROVEN PRODUCTS.

DILL PRODUCTS



No. 6611-D
ROUND DILLECTRIC PATCH UNITS

50 Patches, with one electric vulcanizing unit in container. Patch plate size 1¾" dia.—patch size 1⅛" dia. ---------- **Net; 2.75**



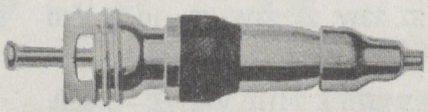
No. 6612-D
OVAL DILLECTRIC PATCH UNITS

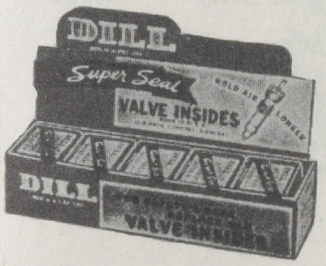
50 Patches, with one electric vulcanizing unit in container. Patch plate size 1¾" x 2¼"—patch size 1" x 1¾". ---------- **Net: 2.75**



No. 6608
HEAVY DUTY DILLECTRIC PATCH UNITS

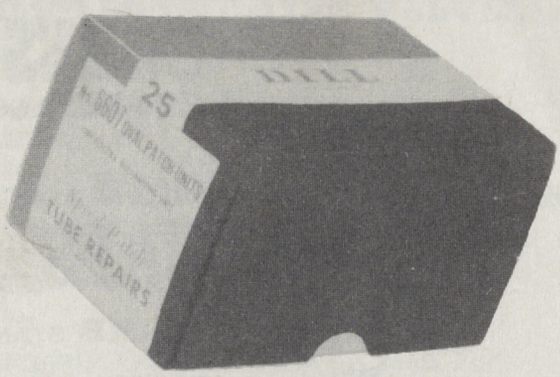
25 Patches, with one electric vulcanizing unit in a container. Here is a heavy duty patch designed to handle repairs of large, thick truck tubes. Made of extra heavy rubber stock, 2¼" in diameter, it produces a feather edge repair as thick and strong as the tube. ---------- **Net: 2.75**





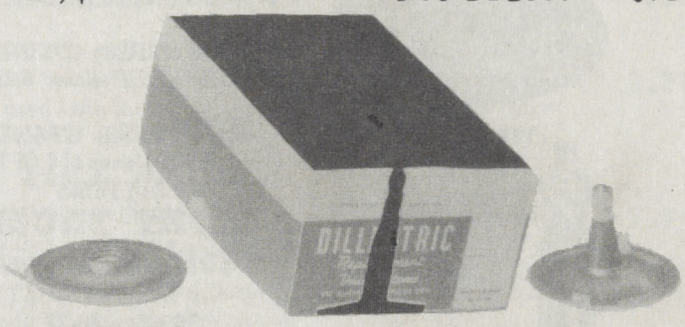
No. 100-AA Valve Insides packed five to a Box and in attractive Display Cartons in Standard Dill colors — Blue and Orange — for use in display cases and to promote sale to car owners.

Retail Price
Box of 5 .60



No. 6607
LONG OVAL DILLECTRIC PATCH UNITS

25 Patches, with one electric vulcanizing unit in a container. Patch plate size 3⅜" x 2⅝". Patch size 1" x 2¾". ---------- **Net Price: 2.75**



DILLECTRIC VALVE STEM REPLACEMENT UNITS

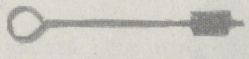
Retail Prices

Note: No CHARGE *for heat units with stems.*

6614A-15	Box of 10 short Dillectric Valves	$4.75
6614A-25	Box of 10 medium Dillectric Valves	4.75
6614A-35	Box of 10 long Dillectric Valves	4.75
6614A-50	Box of 10 hand bendable Dillectric Valves	10.00
6614A-R15CR	Tractor Valve front wheel—air —water — Box of Ten	6.50
6614A-215	Tractor Valve rear wheel—air—water — Box of Ten	13.20
6614A-217	Tractor Valve rear wheel—air—water — Box of Ten	13.20
6614A-218	Tractor Valve rear wheel—air—water — Box of Ten	13.20



		Retail
1428-10	Box of 10 bicycle Dillectric Valves	5.30



No. 6617 WIRE BUFFER

Retail
Each ---------- .45

Schrader Products

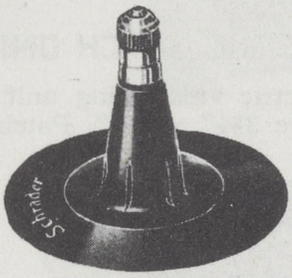
Retail Price



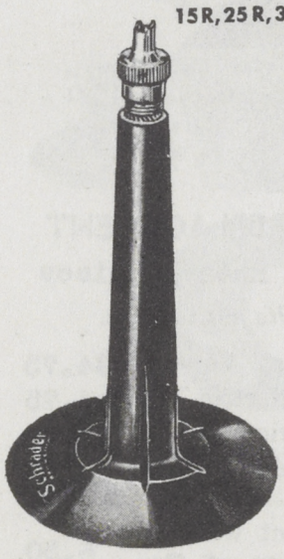
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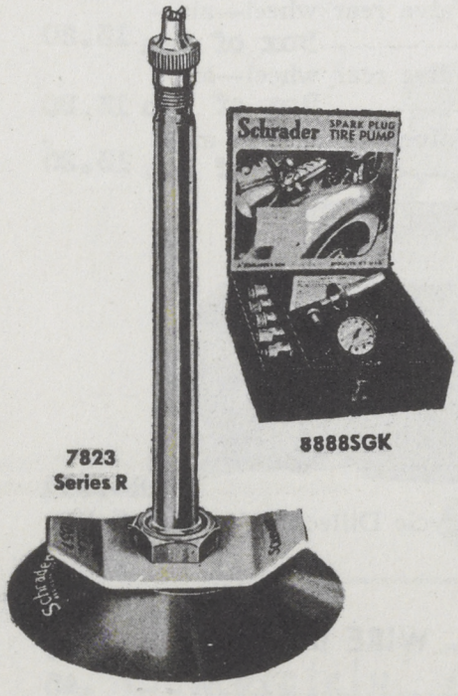
880



15R, 25R, 35R



150R



7823 Series R

8888SGK

CORES—STANDARD TIRE VALVE

4000-MB STANDARD VALVE CORES—5 in a box, 100 in a display — .60

4000-V STANDARD VALVE CORES—In bulk service cartons of 100

CAPS—STANDARD TIRE VALVE

880-MB STANDARD VALVE CAPS—5 in a box, 100 to a display — .45

880-V STANDARD VALVE CAPS—In bulk display cartons of 100

880-V STANDARD VALVE CAPS—In bulk service cartons of 100

PASSENGER TIRE VALVES

15R (TR15) STANDARD TIRE VALVE—Length 1½", Base 2¼" for all 4.00-15; 4.25-12; 4.50-12; 5.00-15, 16; 5.50-15, 16; 6.00-15, 16; 6.50-15, 16; 7.00-15, 16; 7.50-15, 16 Tubes — .79

25R (TR25) STANDARD TIRE VALVE—Length 2$\frac{1}{16}$", Base 2¼" for all 17" sizes; 5.25-18; 5.50-18; 6.00-18 DC Tubes — .79

35R (TR35) STANDARD TIRE VALVE—Length 2⅝", Base 2¼" for 18" sizes of 6.00 FB; 6.50; 7.00; 7.50—for 19", 20", 21", 22"; 30 x 3; 30 x 3½ Tubes — .79

LIGHT TRUCK TIRE VALVES

150R* (TR 150) STANDARD TIRE VALVE—Hand Bendable. Length 3$\frac{11}{16}$", Base 2¼" for 6.50-20 21; 7.00-20, 21; all 4"; 4½"; 34 x 5; 35 x 5; 4.40-23 — 1.50

*Supersedes No. 50R and No. 9335AR

TRUCK AND BUS TIRE VALVES

7823R (TR75A) STANDARD CONVERTIBLE TIRE VALVE—Length 4$\frac{1}{16}$", Base 2¾"; for 5.50-20; 6.00-17, 20; 6.50-17, 18, 20; 7.00-17; 7.50-17; 30 x 5; 32 x 6TT Tubes — 1.75

7791R (TR76A) STANDARD CONVERTIBLE TIRE VALVE—Length 4$\frac{7}{16}$", Base 2¾"; for 6.50-17W, 18W, 20W; 7.00-17W, 18, 18W, 20, 20W, 24; 7.50-17W; 32 x 6 HD; 36 x 6 Tubes — 1.80

7923R (TR177A) STANDARD CONVERTIBLE TIRE VALVE—Length 4¾, Base 2¾" for 7.50-15, 18, 18W, 20, 20W, 24; 8.25-15, 18, 20, 22, 24; 32 x 7; 38 x 7 Tubes — 2.05

7792R (TR77A) STANDARD CONVERTIBLE TIRE VALVE—Length 5⅛", Base 2¾"; for 8.25-18W, 20W Tubes — 2.10

7907R (TR175A) STANDARD CONVERTIBLE TIRE VALVE—Length 5$\frac{9}{16}$", Base 2¾"; for 9.00-15, 18, 18W, 20, 20W, 22, 24; 10.00-15, 20, 22, 24; 36 x 8; 40 x 8; 42 x 9 Tubes — 2.30

7793R (TR78A) STANDARD CONVERTIBLE TIRE VALVE—Length 6$\frac{1}{16}$", Base 2¾"; for 10.00-18, 18W, 20W, 22W, 24W; 11.00-20, 20W, 22, 22W, 24, 24W; 12.00-20, 20W, 22, 22W, 24, 24W; 40 x 10; 44 x 10 Tubes — 2.45

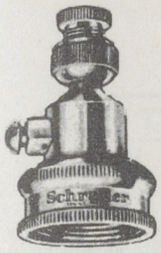
1396R (TR179) STANDARD CONVERTIBLE TIRE VALVE—Length 6$\frac{11}{16}$", Base 2¾"; for 11.00-18, 19; 12.00-18; 13.00-20, 20W, 24, 24W; 14.00-20, 20W, 24, 24W Tubes — 3.15

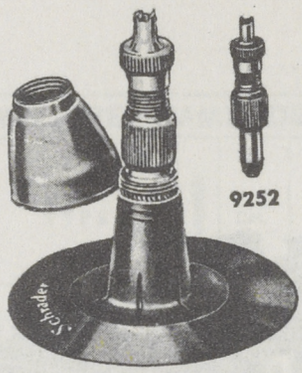
8888TGK FARM TIRE-AIR SERVICE KIT—Complete outfit including: 1 No. 8888G Spark Plug Tire Pump with all five adapters, 1 box of five No. 4000 Cores, 1 box of five No. 880 Caps, 1 No. 8954A Water Adapter, 1 No. 9350 Air-Liquid Tire Gauge, 1 No. 3263 Valve Repair Tool, 1 No. 9251BR Replacement Valve and 1 No. 8104 Valve Fishing Tool — 18.30

YOU CAN BE SURE WITH PROVEN PRODUCTS.

Schrader Products

RETAIL each





TRACTOR AND IMPLEMENT TIRE VALVES

Removable Core Housing Form

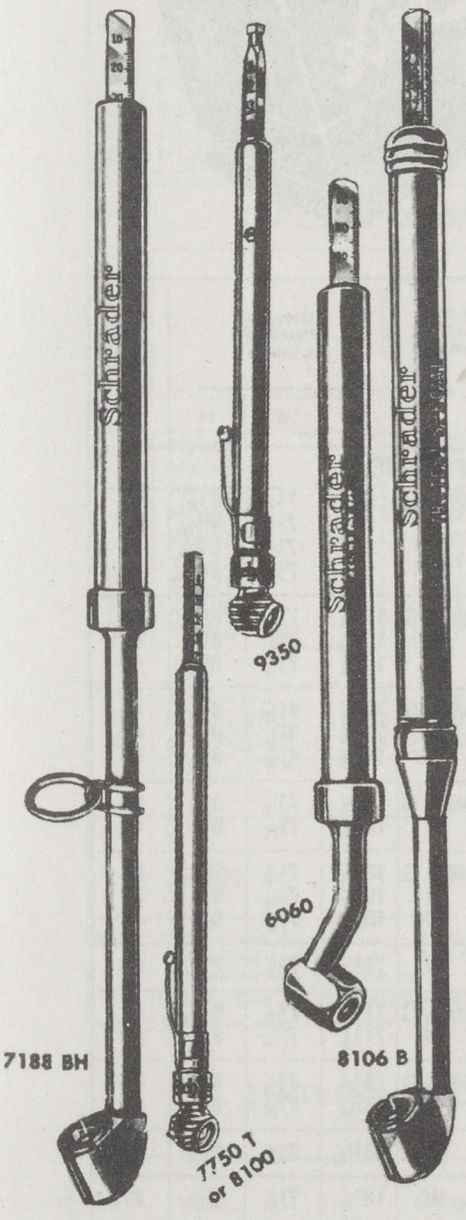
2581R (TR217) STANDARD TRACTOR TIRE VALVE—Length 1 1/16", Base 2¼" for 3.00-12; 3.50-12; 4.00-12, 15, 18, 19, 24, 30, 36; 5.00-12, 15, 16, 21, 36, 40; 5.25-21; 5.50-16; 6.00-12, 16, 20, 22; 6.50-16, 36; 7.00-22; 7.50-16, 18, 20, 22, 24, 36; 8.25-24; 9.00-16, 24, 36, 40; 10.00-24, 36; 11.25-24, 28, 36; 12.00-24, 28; 12.75-28, 32; 13.00-20, 24, 28, 32; 13.50-28; 14.00-20, 24, 28, 32; **6**-24; **7**-24; **8**-24, 36; **9**-16, 24, 32, 36, 42; **10**-24, 28, 38; **11**-24, 26, 28, 38, 42; **12**-26, 38; **13**-26, 30; **14**-26, 30, 34; **15**-28, 30, 34; **18**-26 Tubes — 2.00

Air and Water

9251BR (TR215C) STANDARD TRACTOR VALVE—Length 2 5/16", Base 2¼" for 7.00-22; 7.50-22, 24, 36; 8.25-24; 9.00-24, 36, 40; 10.00-24, 36; 11.25-24, 28, 36; 12.00-24, 28; 12.75-28, 32; 13.00-20, 24 (KM), 28, 32; 14.00-20, 24 (KM-24), 28, 32; **6**-24; **7**-24; **8**-24, 36; **9**-16, 24, 32, 36, 42; **10**-24, 28, 38; **11**-24, 26, 28, 38; **13**-26, 30; **14**-26, 30, 34; **15**-28, 30, 34; **18**-26 Tubes — 2.00

9252 REMOVABLE CORE HOUSING—For Tractor Tire Valves — .80

8954A WATER ADAPTER—Used to connect the Water Hose Coupling to Tractor Air-Water Valves. The extra bushing is required when the Water Adapter is used with the non-removable Core Housing Form of Tractor Valve. The button releases trapped air. — 2.30



PENCIL TYPE TIRE GAUGES

7750-T PENCIL TYPE TIRE GAUGE—Calibrated 4 to 50 lbs. in 1 lb. units—packed five to a 3-color display carton — 2.70

8100 PENCIL TYPE TIRE GAUGE—Calibrated 20 to 120 lbs. in 5 lb. units—packed five to a 3-color display carton — 2.70

TRACTOR Air-Liquid TIRE GAUGE

9350 TRACTOR TIRE GAUGE—Special for Tractor tires. Has pump-out and oiling feature that makes it possible to check pressures in liquid and anti-freeze filled tires without damage to the Gauge. Calibrated from 4 to 50 lbs. in one lb. units — 3.30

SERVICE All-Purpose TIRE GAUGES

7188BH SERVICE GAUGE—With 6" straight extension and dual foot. Calibrated 10 to 60 lbs. in one lb. units—60 to 160 lbs. in 5 lb. units — 6.50

6060 Same, but has single foot and short angle extension — 4.30

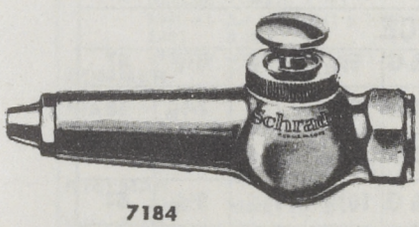
MASTER Trutest Special TIRE GAUGE

Designed as a portable Master Gauge for checking accuracy of other tire gauges and indicators. Built to the highest degree of commercial accuracy from the finest materials obtainable. Guaranteed accurate for 18 months. (Certificate of accuracy guarantee includes two factory recalibrations within an 18 month period.)

8106B TRUTEST SPECIAL MASTER GAUGE—Calibrated from 10 to 60 lbs. in one lb. units—60 to 160 lbs. in 5 lb. units. Packed in velour-lined permanent case with special no-charge recalibration certificate — 9.00

BUTTON TYPE BLOW GUN

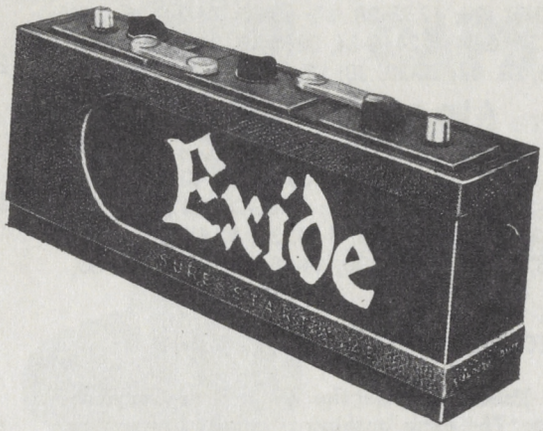
The Blow Gun is such a useful tool in automotive service that every dealer should have one or more ready for immediate use at convenient service points. Blows out fuel lines, clears chips, dust, etc. Schrader Blow Guns are sturdily constructed to meet all service requirements. Quick acting—comfortable grip—airtight.

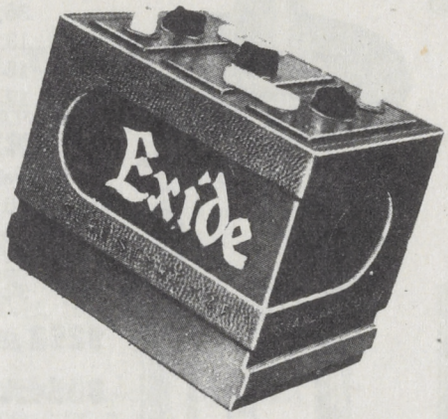


7184 BLOW GUN—With Button for standard shop use. Air blasts controlled by pressing button. Has ¼" Female I.P. thread — Net 2.80

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BATTERIES





Group Size	TYPE	Price Each Net	Min. Service Units (A)	Plates Per Cell	Capacity at S.A.E. Ratings: 20-Hr. Rate Amp. Hrs.	300 Amps. at 0° F Rate: Minutes	300 Amps. at 0° F Rate: 5 Sec. Volts	Capacity 20-Min. Rate Amperes	Container (B)	Separator (C)	Over-all Dimensions in Inches: L	W	H	Net Weight in Pounds
TYPES RECOMMENDED FOR PASSENGER CARS														
1	Hycap 1★	$29.25	24	17	115	4.3	4.40	140	R	W & G	9 3/32	7 1/8	8 7/8	47
	Sure-Start 1★	23.45	18	15	100	3.3	4.20	120	R	W	9 1/16	7 1/8	8 11/16	41
	Startex 1▲	19.95	15	15	90	3.0	4.10	114	C	W	9 1/16	7 1/8	8 11/16	38
	XT-131	16.45	9	13	80	2.2	3.90	100	C	W	9 1/16	7 1/8	8 11/16	36
2L	Hycap 2L★	29.25	24	19	115	4.3	4.40	140	R	W & G	10 7/16	7 1/8	7 15/16	46
	Sure-Start 2L★	23.45	18	17	100	3.3	4.20	126	R	W	10 9/16	7 1/4	8 1/16	42
	Startex 2L	19.95	15	15	90	2.4	3.90	110	C	W	10 9/16	7 1/4	8 1/16	40
2E	Hycap 2E★	34.50	24	19	130	5.3	4.56	160	R	W & G	19 3/8	4 1/16	8 7/8	56
	Sure-Start 2E★	28.25	18	17	110	4.1	4.40	140	R	W	19 3/8	4 1/16	8 5/8	48
	Startex 2E	24.95	15	15	100	3.3	4.20	120	R	W	19 3/8	4 1/16	8 7/8	49
2	Hycap 2★	34.50	24	19	130	5.3	4.50	160	R	W & G	10 3/8	7 1/8	8 7/8	53
	Sure-Start 2★	27.25	18	17	110	4.1	4.33	138	R	W	10 1/4	7 1/16	8 1/2	48
2F	Hycap 2F★	34.50	24	19	130	5.3	4.50	160	R	W & G	10 1/2	7 1/8	9 3/16	54
	Sure-Start 2F★	28.45	18	17	120	4.5	4.40	150	R	W	10 1/2	7 3/16	9 3/16	50
	Startex 2F	23.50	15	15	100	3.3	4.20	120	C	W	10 1/2	7 1/4	9 1/4	47
3L	Sure-Start 192S	30.75	18	19	110	3.8	4.35	142	C	W	11 3/4	7 1/4	7 7/8	50
3	Hycap 3★	45.00	24	21	145	6.2	4.60	165	R	W & G	11 3/4	7 1/8	8 15/16	59
	VX-173	35.45	15	17	120	4.7	4.33	144	R	W	11 3/4	7 1/16	9	55
4	Hycap 4★	52.00	24	23	160	7.1	4.60	175	R	W & G	12 7/8	7 1/8	8 15/16	65
	VX-194	40.75	15	19	135	5.6	4.48	162	R	W	13 1/16	7 1/16	9	61
5	XH-21	57.50	18	21	168	7.5	4.75	200	R	W	13 21/32	7 1/8	9 5/16	73
7	XH-25	66.00	24	25	200	10.1	4.88	240	R	W	16 3/16	7 1/32	9 5/16	87
10	Sure-Start 10 (12 Volts)	32.75	18	9	55	—	—	—	R	W	13 1/8	6 5/4	9	51
TYPES RECOMMENDED FOR COMMERCIAL SERVICE														
1	Hycap 1★	29.25	24	17	115	4.3	4.40	140	R	W & G	9 3/32	7 1/8	8 7/8	47
2L	Hycap 2L★	29.25	24	19	115	4.3	4.40	140	R	W & G	10 7/16	7 1/8	7 15/16	46
2	Hycap 2★	34.50	24	19	130	5.3	4.50	160	R	W & G	10 3/8	7 1/8	8 7/8	53
2F	Hycap 2F★	34.50	24	19	130	5.3	4.50	160	R	W & G	10 1/2	7 1/8	9 3/16	54
3	Hycap 3★	45.00	24	21	145	6.2	4.60	165	R	W & G	11 3/4	7 1/8	8 15/16	59
4	Hycap 4★	52.00	24	23	160	7.1	4.60	175	R	W & G	12 7/8	7 1/8	8 15/16	65

OVER 30 YEARS OF AUTOMOTIVE SERVICE.

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TYPES RECOMMENDED FOR HEAVY DUTY TRUCK AND MOTOR COACH SERVICE

Group Size	TYPE	Assembly	Cat. No.	Price Each Net	Min. Service Units (A)	Plates Per Cell	Volts	Capacity at S.A.E. Ratings: 20 Hr. Rate Amp. Hrs.	4 Hr. Rate Amp. Hrs.	20Min. Rate Amps.	Container (B)	Separator (C)	Overall Dimensions in Inches: L.	W.	H.	Net Weight in Pounds
6 VOLT TYPES																
3T	3 LXWG-17	1	C407	$71.50	48	17	6	158	117	170	R	W & G	16 3/16	7 1/32	9 5/16	90
5T	3 LXWG-21	1	C275	90.00	48	21	6	198	146	213	R	W & G	18 7/8	7 9/16	10 1/2	109
7T	3 LXWG-25	1	C408	105.00	48	25	6	237	175	255	R	W & G	22 11/16	7 1/2	10 3/8	125
12 VOLT TYPES																
1B	6 XH-13	1	C-410	69.75	21	13	12	101	76	120	R	W	17 15/16	7 9/16	10 1/16	95
1B	6 XH-15	1	C-286	81.00	21	15	12	118	87	140	R	W	20 1/16	7 9/16	10 1/16	115
1B	6 LXWG-11-1S	1	29259	95.00	48	11	12	98	73	107	R	W & G	20 1/16	7 9/16	10 1/16	117
2B	6 LXWG-13-3S	3	29282	107.00	48	13	12	118	87	127	R	W & G	21 1/8	8 11/16	10 1/2	130
3B	6 LXWG-15-3S	3	29260	119.00	48	15	12	138	102	150	R	W & G	21 1/8	9 13/16	10 1/2	147
4B	6 LXWG-17-3S	3	29283	132.75	48	17	12	158	117	170	R	W & G	21 1/8	10 15/16	10 1/2	167

TYPES RECOMMENDED FOR HEAVY DUTY DIESEL ENGINE SERVICE

GROUP SIZE	TYPE	Assembly	Price Each Net	Min. Service Units (A)	Plates Per Cell	Volts	Capacity at S.A.E. Ratings: 20 Hr. Rate Amp. Hrs.	1½ Min. at 0° F. Amps.	1½ Min. at 32° F. Amp.	Container (B)	Separator (C)	Overall Dimensions in Inches: L.	W.	H.	Net Weight in Pounds
6 VOLT TYPES															
—	Hycap 1	1	$29.25	24	17	6	115	490	630	R	W & G	9 3/32	7 1/8	8 7/8	47
—	Hycap 2	1	34.50	24	19	6	130	552	710	R	W & G	10 3/8	7 1/8	8 7/8	53
—	Hycap 3	1	45.00	24	21	6	145	613	788	R	W & G	11 3/4	7 1/8	8 15/16	59
—	Hycap 4	1	52.00	24	23	6	160	674	867	R	W & G	12 7/8	7 1/8	8 15/16	65
—	XH-173	1	38.45	24	17	6	135	536	680	R	W	11 1/2	7 1/8	9	58
—	XH-194	1	44.50	24	19	6	152	603	765	R	W	12 5/8	7 1/8	9	65
5D	XH-21	1	57.50	24	21	6	168	670	850	R	W	13 21/32	7 1/8	9 5/16	73
7D	XH-25	1	66.00	24	25	6	200	804	1020	R	W	16 3/16	7 1/32	9 5/16	87
9D	3 DS-41-1R	1	118.50	24	41	6	336	1400	1820	R	W	25 1/2	7 1/2	10 1/4	148
12 VOLT TYPES															
4D	6 VX-19-3	3	96.50	24	19	12	135	558	702	R	W	20 3/8	8 11/16	10	130
6D	6 XCK-21-3S	3	105.00	24	21	12	150	620	780	R	W	21 3/8	9 13/16	10 3/16	145
8D	6 XH-25-3S	3	125.50	24	25	12	200	804	1020	R	W	21 1/8	10 15/16	10 1/2	176

FOR RADIO SERVICE

					Average Discharge Rate Continuous: 1.0 Amps.	.75 Amps.	.5 Amps.					
2R-120	$9.20	18	15	2	120	160	240	R	W	7	3 3/8	9	17

NOTE (1) For 6 Volt Sets use one of the following types:
Sure-Start 1—105 A np. Hrs. Sure-Start 2F—130 Amp. Hrs. or Startex 1—95 Amp. Hrs. at the 1 Amp. Rate and add Wing nut Terminals Type E-66. E-66 Terminals—List $1.08 per pair.

(2) Radio Type 2R-120 is equipped with Carrying Handle.

ENGLISH AND EUROPEAN MOTOR CAR REPLACEMENT DATA

Make	Year	Model	Battery Group No.
AUSTIN			
	1936-39	Twenty (2)	1
	1940-41	All exc. 1941 8 H.P.	10
	1941	8 H.P.	1
	1948-49	Devon & Dorset	10
COMMER			
	1948	8 cwt. Van	10
FIAT			
	1948	2500	10
FORD			
	1948	Anglia & Prefect	1
HILLMAN			
	1948	Minx	10
HUMBER			
	1948	14 H.P. Hawk	10
M. G.			
	1947-48	Midget & 1¼ Litres	10
MORRIS			
	1948	10 cwt. Van	10
	1948-49	All	10
ROVER			
	1948	60 & 70	10
STANDARD			
	1948	12 & 14 H.P.	10
SINGER			
	1946-48	Super 10 & 12	10
SUNBEAM-TALBOT			
	1948	10 H.P. & 2 Litre	10
VAUXHALL			
	1948	14 H.P.	10
WOLSELEY			
	1948	All	10

D. ACKLAND & SON, Limited
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REPLACEMENT DATA

PASSENGER CAR

Make	Year	Model	Battery Group No.
BUICK			
	1934-35	34-90, 35-90	3
	1934-37	Std. 6, 8-60, 34-40, and 50, 35-40, and 50, 36-40, 37-40	1
	1934-37	Master 6, 8-80, 8-90, 34-60, 35-60, 36-60, 80 and 90, 37-60, 80 and 90	2
	1938-50	All	2E
CADILLAC			
	1934-38	V-8, exc. 36-60, 37-65	3
	1934-37	V-12	5
	1934-37	V-16	7
	1936-39	V-8, Ser. 60, 65	2
	1938-39	V-16	5
	1940	V-8, 60S, 62, 72, and 75	2
	1940	V-16	2
	1941-49	V-8's	2
CHEVROLET			
	1934-36	All	1
	1937-39	All	2L
	1940-49	All	1
CHRYSLER			
	1935-36	6 Cylinder, Airstream 6 and 8	2
	1935-36	All Airflow, Imperial Airflow, 1936 Imperial Custom Airflow	3
	1937-39	Royal 6, Imperial 8	2
	1937-39	Custom Imperial	3
	1940-49	All	2
CORD			
	1936-37	V-8	3L
CROSLEY			
	1937-49	All	1
DE SOTO			
	1934	6-SE Airflow	3
	1935-49	All	2
DODGE			
	1935-49	All	1
FORD			
	1936-39	All	2L
	1940	All	2F
	1941	Special V-8	2L
	1941-48	De Luxe, Super De Luxe and Six	2F
	1949	Deluxe and Custom	2F*
FRAZER			
	1946-49	All	1
GRAHAM			
	1936-37	All except radio-equipped cars	1
	1937	85, 87, 88, 89 and 95 with radio	2
	1938-42	Std. and Spl. 6 without radio	1
	1938-40	Sup. Chg. 97, and Std. and Spl. 6 with radio	2
	1941-42	Sup. Chg.	2
	1941-42	Hollywood and Hollywood Sup. Chg.	2L
HUDSON			
	1934-47	8 Cyl.	3L
	1935-47	6 Cyl.	2L
	1948-49	All	2F
HUPMOBILE			
	1936	6 Cylinder Series 518, 521, 618	2
	1936	8 Cylinder Series, 527, 621	2
	1938-39	E. H.	2
KAISER			
	1946-49	All	1
LAFAYETTE			
	1934-41	All	1
LINCOLN			
	1936-40	V-12	5
	1936-39	Zephyr	2L
	1940	Zephyr	2F
	1941-49	Zephyr, Continental, Custom	2F
MERCURY			
	1939	All	2L
	1940-49	All	2F
METEOR			
	1949	Deluxe and Custom	2F
MONARCH			
	1947-49	All	2F
NASH			
	1936-42	400 Series, Amb. 600, Amb. 6 Lafayette	1
	1936-42	Ambassador 8	2
	1946-50	All	1
OLDSMOBILE			
	1934-37	All 6 Cyl.	1
	1934-37	All 8 Cyl.	2
	1938-48	All	2E
	1949	6 Cyl. (exc. Hydramatic)	1
	1949	6 Cyl. Hydramatic, all 8 Cyl.	2
PACKARD			
	1934-37	All exc. 120 and 1937 6 Cyl.	4
	1935-42	120	2
	1937-42	6 Cyl.	1
	1938-42	All 8's, exc. 1938 Super 8 and 1941 Clipper	2
	1938	Super 8; 1938-42 All 12 Cyl.	4
	1941-49	All	2E
PIERCE-ARROW			
	1936-38	All except 12 Cylinder	3
	1936-38	12 Cylinder	4
PLYMOUTH			
	1934-49	All exc. 1937-40 with Radio	1
	1937-40	With radio	2
PONTIAC			
	1934-37	All 8's	2
	1935-38	6 Cyl. 1940 Arrow	1
	1938-40	8 Cyl.	2E
	1939	22 Series	2L
	1938	25 Series	2L
	1941-49	All (exc. 1949 20, 22 Series)	2E
	1949	20, 22 Series	1
ROLLS-ROYCE			
	1936-38	40/50 H.P. Phantom I, II and III (2)	1
	1936-37	English Chassis	1
STUDEBAKER			
	1936	All	1
	1937-38	All	2
	1939-50	All	1
TERRAPLANE			
	1934-38	All	2L
WILLYS			
	1936-49	All	1

REPLACEMENT BATTERIES FOR TRUCKS

Make	Year	Model	Battery Group No.
CHEVROLET			
(T)	1934-36	All	1
	1937-39	½ ton Panel Delivery on Passenger Car Chassis	2L
	1937-42	½ Ton Pick-up and All 1½ Ton trucks	1
	1946	PL, PX	2
	1946-49	All Except PL and PX	1
DODGE			
(T)	1934-36	K30 to K34, KF30 to KF34 (1½ Ton), KC, CKL, K32, 33, 34, All KH and KFH 30 to 34, Series LC, LE, LF, FD1-16	1
	1934-38	All K35 to K48, Series LG, LH, FD3, FD4	2
	1937-46	MC, MD, ME, M1, RC, RD, RE, TC, TD, TE, TXC, TXE, TXD, VC, VD, WC, WD, T-(112, 113, 114, 115, 116, 117)	1
	1937-46	MF, MH, RF, RG, RH, TF's, TG's, TH's, TXF, TXH, VF, VG, VH, VM, WF, WFM, WG, WH, WGM, WHM, T-(110, 111, 118, 119, 120, 121, 122, 123, 128, 129, 130, 131)	2
	1937-46	MK, ML, MX, RK, RL, RO, RP, RX, LM-7, TK's, TL's, T44, T56, TXK, VL, VK, WL, WK, T124, T126, T136	3
DODGE (Cont'd.)			
(T)	1937-42	TDK's, TLD's, VDK, VLD, WLD, WKD (4)	4
	1946-47	T-135	4
	1940-49	DB, DBM, DC, DCM, DD, DDM, DE, DEM, All series 1, 2, 3	1
	1940-49	DB, DBM, DC, DCM, DD, DDM, DE, DEM, Series 4, 5, 6, 7	2
FARGO	1937	FD-3, FD-4, FE-3, FE-4, FE-6, FED-4 Stand.	2
(T)	1938-41	FG-4, FG-6, FH-4, FH-6, FJ-4, FJ-6, FJM-4, FJ-7, FK-4, FKM-4, FK-6, FK-7	2
	1938-49	FG-1, FG-2, FG-3, FH-1, FH-2, FH-3, FJ-1, FJ-2, FJ-3, FJM-3, FK-1, FK-2, FK-3, FKM-3	1
	1939-41	FH-7, FJ-8, FK-8	3
	1939-41	FHZ, FJZ, FJZ-8, FKZ-8	4
	1940-49	FL, FLM, FM, FMM, Series 1-2-3	1
	1940-49	FL, FLM, FM, FMM, Series 4-5-6-7	2
FORD			
(T)	1934-39	V-8	2L
	1940-41	All	2F
	1942		2F
	1946-47		2F
	1948-49		2F*

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

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REPLACEMENT BATTERIES FOR TRUCKS CONT'D.

Make	Year	Model	Battery Group No.
FORD—Transit			
(B)	1947-49		4B
G.M.C.			
(Made in Canada)			
(T)	1936	T14, T15, T16, T18, T23, T33, T46	2
	1937	T14, T15, T16, T16H	1
	1938-49	Series 93, 94, 95, 96, 97, 98	1
G.M.C.			
(Made in U.S.A.)			
T & B)	1931-38	T or F 26-96, except T-61 Diesels or Specials	2
	1931-32	T19 All; 1932-35 T23 except 35 Specials	1
	1934-38	T or F 16, 18, all except Specials	1
	1935	T61 Diesels	2B
	1936	4189B, T14	1
	1936-38	T or F23, except Specials	2
	1938	T15, 145, 155	1
	1939-40	AC or AF-100 to 460, except Specials	1
	1939-46	AC, ACT, AF, AFT, AY500 to 850 except Specials	2
	1939-46	ADF-500 to 850 (2)	7D
	1939-46	ADC-500 to 900	8D
	1938	74D, RW146CD	4B
	1946	ACS520, ECS Models 300, 370, 450	2
	1946	EC Models 100 thru 470, EF-240, EF Models 300 thru 470	1
	1948	TD & TG3207, 3601, 4008, 4507; TDH & TDM 3209, 3612, 4010, 4509; TDH-4510, 5101, 5502; PD-3751 thru 4151	4-B

Make	Year	Model	Battery Group No.
INTERNATIONAL			
(T)	1935	C30	1
	1937-40	D2, D5, D15, D30, D186T, DQ215, N-30	1
	1935-40	C10, C20, C30, C35, D300	2
	1937-42	A7, A8, AR626F (2)	4
	1934-48	A4, A5, A6, B4, C50, C55, C60, D-50-60-70, DR-60-70, 246, 346, 426, D500, 626, RD700, W's, K8 to 12 incl., K8F, KUF, KR-12	4
	1936-48	C40, D35, D40, D216T, K6, KS-6, K7, KLF	3
	1940-46	D2, D5, D15, D30, D186T, K1 to 5 incl.	2
	1946	Six Wheelers K6F	3
	1946	Six Wheelers K8F, K11F	4
	1947	KB1	1
	1947-48	KB1M, KB2, KB3, KB3M, KB5, KBS-5	1
	1947-48	KB6, KBS6, KB6F, KB7, KBS7	3
	1947-48	KB8, KBR8, KBSF, KB10, KBS10, KBR11, KBS11, KB11F	4
	1947-48	KBR12, KBS12, KBR14, KBS14 (2)	4
	1948	KB1	2
MAPLE LEAF			
(T)	1932-49	All	1
MERCURY (Canadian)			
(T)	1946-49		2F
PLYMOUTH			
(T) & (TC)			
	1936-49	Commercial Cars and Trucks	1

REPLACEMENT BATTERIES FOR TRACTORS.

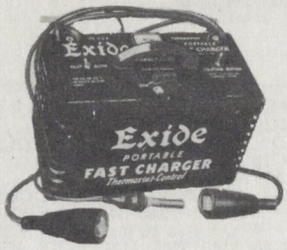
Make	Year	Model	Battery Group No.
ALLIS-CHALMERS			
(TR)	1937	K, KO, SO (2)	2
	1936-38	U, U-40, V, VC, 42 and 54 Speed Patrol with Ltg. only	3
	1936-38	A, E-60, 42 and 54 Speed Patrol with Stg. and Ltg.	4
	1938	KO-54 Speed Patrol, K, WK (2)	2
	1938	KO, WKO	2
	1938	SO, WSO (2)	2
	1939-40	K, KO (2)	1
	1939-40	M	3
	1939-40	S, SO (2)	3
	1940-47	HD-7, HD-10 (2)	7D
	1939-42	KO54 (2)	2
	1941-42	AD (2)	5D
	1939-47	B, 1B, C, RC, WC, WF, Speed Maintainer, "W" Speed Patrol, Farm BC and WG	1
	1939-47	U, 1U, UC, 42 and 54 Lighting only	2
	1939-47	A, 42 and 54 Starting and Lighting	4
	1941-47	HDA, HD-14 and 19 (2)	8D
	1946-47	HD-5 and Grader (2)	5
	1947	D	1
CASE			
(TR)	1936-40	Lighting only—C1, L1, LI, LIH, LIM, LIMH	1
	1940	Lighting only—L, LH, LS	4
	1936-40	Starting and Lighting C1, L, L1	4
	1941	LAI	2E
	1942-47	LAI	4
	1940-47	All Series (S, SC, SI, SO, V, VA, H, O, IW)	1
	1938-47	All Series (C, CC, CH, CO, CV, CY, CCS, D, L, R)	2
	1941-47	LA, LAH, LAIH	4
	1944-47	LI	3
COCKSHUTT PLOUGH			
(TR)	1946-49	All	1
FORD			
(TR)	1949	Farm Tractor	1
FERGUSON			
(TR)	1944-49	All Models	1
INTERNATIONAL			
(TR)	1939-47	Lighting only on TD6 and TD9	4
	1939-47	14, O4, W4, U4, 14, F14, 20 Farmall (A, B, H, BN, AV, HV, Cub, C) International A, I14, O14, W14	1
	1939-47	20 Ind, 130, W30, Light Duty—Farmall Model MV, 16, O6, U6, W6, T6, OS6	3
	1939-47	ID40, I40, W40, Heavy Duty—Farm M, O6, W6, T6, T9, 19, U9, W9, WR9	4

Make	Year	Model	Battery Group No.
INTERNATIONAL (Cont'd.)			
	1940-47	Heavy Duty TD6, ID6, WD6, Farmall MD, MDV, UD6, ODS6 (2)	2
	1940-47	Heavy Duty T9, TD9, WD9, ID9, UD9, U14, UD14, WDR9 (2)	3
	1947	UD18 (2)	4
	1947	T14, TD14 (2)	5
	1947	TD18 (2)	3T
	1947	Lighting only—FM, F-MD, WD6, ID6, W6, W9, 19, WD9, ID9, O6, OS6	1
	1947	Lighting only—T6, TD6, T9, TD9	2
	1947	Lighting only—T14, TD14 (2)	3T
INTERNATIONAL			
(IA)	1939-47	P12, P40, U2, U4 Ltg. (P30, PD40)	1
	1939-47	200, U6, Stg. P30	3
	1939-47	PA40, PA50, PA100, U9, Stg. PD40	4
	1939-47	PD80 (2)	4
JOHN DEERE			
(TR)	1940-47	Series (B, H), Lighting only on Series (A, D, GM)	1
	1940-47	Series (D, GM) Starting and Lighting (2)	1
	1940-47	Series A—Starting and Lighting	2
	1946	A, AR, B, BR, H, L, LA, LI	1
	1946-47	GM, D (2)	1
	1947-48	A, D, G (2)	1
MINNEAPOLIS-MOLINE			
(TR)	1937-47	UDLX-ZTI, ZTN, ZTS, ZTU	2
	1937-47	RTI, RTN, RTS, RTU to number 404799 inc.	2
		Above number 404799	2L
	1938-42	GTI, UTI, UTU, UTS except with Butane Engine to number 316499 incl.	2E
		Above number 316499 and all UTS with Butane Engine	2L
	1938-47	FTA, GT, GTA to number 905081 incl.	2E
		Above number 905081	2L
	1946	R, RN to 404800, Z, ZN	2
	1946	R, RN from 404801, U from 316500, Standard U Butane equipment, GTA from 162001	2L
	1946	U to 316499, Universal U Butane Equipment FTA, GT, GTA to 162001	2E
OLIVER			
(TR)	1936	28-44	4
	1936	28-44 Lighting only	1
	1936-37	18-28	2
	1936	44 Special	3
	1937	28-44	3
	1938	28-44	2
	1938-40	70	1
	1938-40	80, 90, 99	2
	1941-47	60, 70, 80	1
	1941-47	90, 99	2
	1947	RC80 Ind 80	2E

Exide

FAST CHARGER

Model EX-300
110V 60 Cycle AC



SPECIFICATIONS

RUGGED STEEL CASE.
4 Rubber buffers on base.

CHARGING LEADS.
6 ft. Rubber covered 100 amp. charging clips.

AC LEAD.
6 ft. Rubber covered cable. Equipped with 3 way plug.

AMMETER.
0-75 Ampere range.

COOLING FAN.
4 Blade--6" diameter.
Speed 2200 RPM. Sealed bearings no lubrication required.

CHARGING CONTROL.
3 step rotary switch. Charging range--Fast 55-75 amps.
Slow--10-15 amps.

ALL PARTS EASILY ACCESSIBLE.
4 screws remove front panel.

Net Price $160.00

FAST CHARGER

Model EX 201
110 V 60 Cycle



SPECIFICATIONS

THERMOSTAT.
Bellows type. Set for 125 Degrees F.
CHARGING CONTROL
8 step rotary control. 1 slow charge position. 7 fast charging positions.
AMMETER
0-100 ampere range
CHARGING LEADS
7 ft. extra flexible. Heavy duty charging clips
AC LEAD
14 ft. rubber covered.
TRANSFORMER
Double wound. Insulated for 1500 Volts.

Net Price: $260.00

Capacity Tester EX-70



SPECIFICATIONS

Precision type, electrically expanded scale, meter calibrated to .02 Volt.
Scales in 3 colours--clearly marked for easy reading.
After fast charge test calibrated for 125 Degrees F.
After slow charge test calibrated for 80 Degrees F.
Lead length--30 inches.
Separate voltage and load leads.
Load current 186 amperes with a fully charged 100 AH Battery.
Spring loaded voltage contacts.
Silver plated contact points.
Cupaloy prod points.

Designed for testing batteries in the car.

Hang it on the hood ***Rest it on the fender***

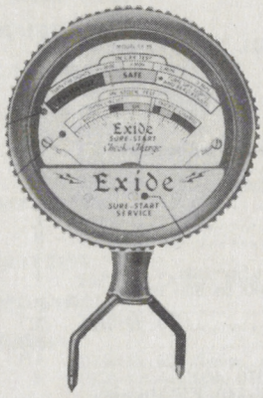
Can be mounted on the wall in the Service Station

Net Price $42.00

Model EX-90

new method of testing batteries "in the car.

Check-Charge



TESTS BATTERIES IN THE CAR FOR STATE OF CHARGE.

CHECKS STOCK BATTERIES.

CUSTOMERS CAN READ AND UNDERSTAND TEST RESULTS.

THE METER CAN BE HELD IN THE HAND OR HUNG ON THE CAR.

Net Price: $21.25

MERCHANDISERS with KEEPACHARGES



These Merchandisers will enable you to keep your supply of Batteries in full view at all times as well as keeping them at full charge ready for instant use.

	Net Price
50 Battery Merchandiser	45.70
9 Battery DeLuxe Merchandiser	28.00
6 Battery Standard Merchandiser	21.50
9 Battery C.L.M. Vendor Type	14.00

BATTERY TOOLS

		Net Price
EXIDE TOOL KITS Complete		9.85
PARTS FOR TOOL KIT		
Combination Post and Terminal cleaner		1.30
Terminal Puller		2.75
Spreader Reamer		1.90
Battery Pliers		1.70
Terminal Nut Wrench		.80
Box of Post Shims		.55
Battery Carriers	each	.40
4 oz. Jar Terminal Grease		.40
Brush		.35

EXIDE SALES MAKER

		Net Price
EXIDE SALES MAKER Complete		$4.95
PARTS FOR SALES MAKER		
S-1-B Hydrometer Syringe complete		1.75
Water Servicer		.65
Glass Jars	each	.43
Rubber Washers	each	.04
Metal Carrier only		2.53

EXIDE BATTERIES assure a QUICKER, FASTER start and LONGER LIFE.
We carry a large stock of BATTERIES, TESTERS and SPARE PARTS. If your particular requirements are not listed, please do not hesitate to contact,

D. ACKLAND & SON LIMITED
WINNIPEG, MANITOBA

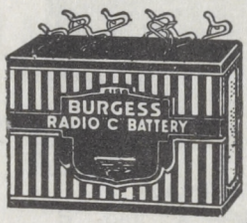
OUR SALESMEN GET CREDIT FOR ORDERS YOU PHONE OR MAIL.

BURGESS



No. F4H

No. F4H — 6 volt Lantern Battery. Suitable for railroad lanterns and radio dial lights. Size $2\frac{19}{32}$" x $2\frac{19}{32}$" x $4\frac{5}{16}$". Retail price. .95



No. 5156

No. 5156—$22\frac{1}{2}$ volt "C" Battery, tapped +, —3v, — $4\frac{1}{2}$v, — 6v, — 9v, — $13\frac{1}{2}$v, — $16\frac{1}{2}$v, — $22\frac{1}{2}$ volt. Size $4\frac{1}{8}$" x $2\frac{1}{2}$" x $2\frac{3}{4}$". Retail Price..... 2.50



No. 4FH

No. 4FH — $1\frac{1}{2}$ volt Little Six Dry Cell. Size $2\frac{9}{16}$" x $2\frac{9}{16}$" x $4\frac{1}{4}$". Retail price..... .80



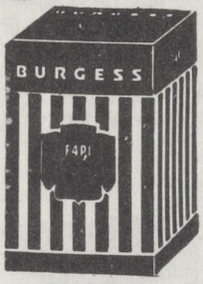
No.237

No. 237—$4\frac{1}{2}$ volt "C" Battery, Plug-in tapped +, — 3v, — $4\frac{1}{2}$ volt. Size $3\frac{15}{16}$" x $1\frac{3}{8}$" x $2\frac{21}{32}$". Retail price..... .80



No. 536

No. 536—$4\frac{1}{2}$ volt "C" Battery, Plug-in tapped +, — 3v, — $4\frac{1}{2}$ volt. Size $2\frac{1}{2}$" x $2\frac{5}{8}$" x $1\frac{3}{8}$". Retail Price..... .85



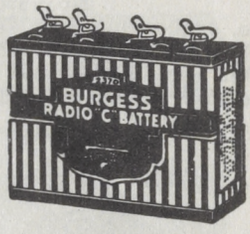
No. F4P1

No. F4P1 — 6 volt Portable Type "A" Battery, for use with A.C. and D.C. sets. Size $2\frac{5}{8}$" x $2\frac{5}{8}$" x $4\frac{1}{32}$". Retail Price ..... .90



No. 5360

No. 5360—$4\frac{1}{2}$ volt "C" Battery, tapped +, — $1\frac{1}{2}$v, — 3v, — $4\frac{1}{2}$ volt. Size $2\frac{7}{16}$" x 3" x $\frac{7}{8}$". Retail price.... 1.00



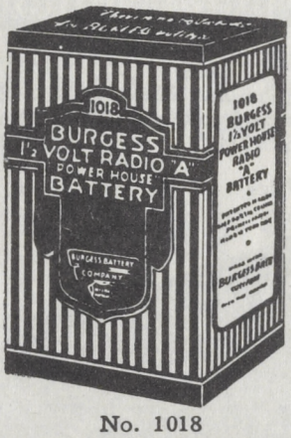
No. 2370

No. 2370—$4\frac{1}{2}$ volt "C" Battery, tapped +, — $1\frac{1}{2}$v, — 3v, — $4\frac{1}{2}$ volt. Size 4" x $1\frac{3}{8}$" x $3\frac{1}{2}$". Retail price..... .95



No. 4F2J

No. 4F2J—3 volt Twin-Six Telephone Battery. Also used in TW2 Lanterns. This battery is equivalent to two No. 6 Telephone Cells. Size $2\frac{5}{8}$" x $5\frac{7}{8}$" x $3\frac{7}{8}$". Retail Price..... 1.60



No. 1018

No. 1018—$1\frac{1}{2}$ volt "A" Battery. Designed for 4 and 5 tube 1.4 volt home radio sets. Size $7\frac{3}{8}$" x $4\frac{9}{16}$" x $3\frac{15}{16}$". Retail Price..... 3.85



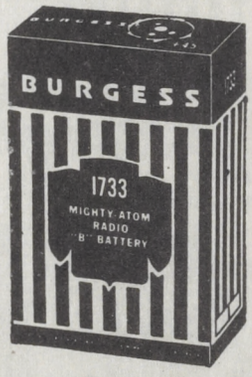
No. 810

No. 810—6 volt Portable Type "A" Battery. For use with A.C. and D.C. sets. Size $3\frac{13}{16}$" x $2\frac{19}{32}$" x $5\frac{5}{16}$". Retail Price..... 1.90



No. 1734

No. 1734 — $67\frac{1}{2}$ volt Burgess "Mighty-Atom" "B" Battery, Snap fastener terminals. Fits camera and personal portable radio sets. Size $2\frac{11}{16}$" x $1\frac{1}{4}$" x $3\frac{3}{4}$" Retail Price..... 3.70



No. 1733

No. 1733—45 volt Burgess "Mighty-Atom" Portable "B" Battery. Equal in service to "B" batteries of larger dimensions. Plug-in —, and 45 volt. Size $3\frac{1}{2}$" x $1\frac{3}{4}$" x $5\frac{1}{2}$". Retail Price..... 3.25



No. 2308

No. 2308—45 volt "B" Battery. Designed for 4 and 5 tube 1.4 volt radio sets. Plug-in —, + $22\frac{1}{2}$v + 45 volt. Size 8" x $3\frac{1}{8}$" x 7". Retail Price..... 4.15



No. 10308

No. 10308—45 volt extra heavy "B" Battery. Designed for 5-6-7 and large 1.4 volt tube radio sets. Plug-in—, + $22\frac{1}{2}$v, + 45 volt. Size 8" x 4" x 7". Retail price..... 4.95



No. 21308

No. 21308 — 45 volt Super Service "B" Battery. Specially designed for large radio sets. Plug-in, —, + $22\frac{1}{2}$v + 45 volt. Size 8" x $4\frac{1}{2}$" x $7\frac{1}{2}$". Retail price..... 5.50



No. 1030

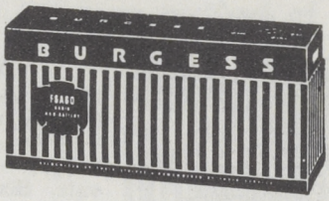
No. 1030—$1\frac{1}{2}$ volts. Extra Heavy Duty "A" Battery. Specially designed for large 1.4 volt tube home radio sets. Size $8\frac{7}{16}$" x 4" x $6\frac{5}{16}$". Retail Price..... 5.00

BURGESS



No. 1860

No. 1860—"A" and "B" Combination Pack, 1½ volts "A" and 90 Volts "B" Battery. Designed for home radio sets. Size 15⅞" x 4³⁄₁₆" x 7".
Retail Price..... 11.25



No. F6A60

No. F6A60—"A" and "B" Combination Pack, 7½ volts and 9 volts "A," 90 volts "B". Size 9¼" x 2¹¹⁄₁₆" x 4½".
Retail Price..... **7.95**



No. 4SD60

No. 4SD60—"A" and "B" "Mighty-Atom' Combination Pack, 1½ volt "A" and 90 volts "B", Designed for Home Radio Sets. Size 10½" x 4" x 6⅞". Retail Price.... **10.95**



No. 4FP

No. 4FP—1½ volt Portable type "A" Battery. Size 2⁹⁄₁₆" x 2⁹⁄₁₆" x 4³⁄₃₂".
Retail price..... **.90**



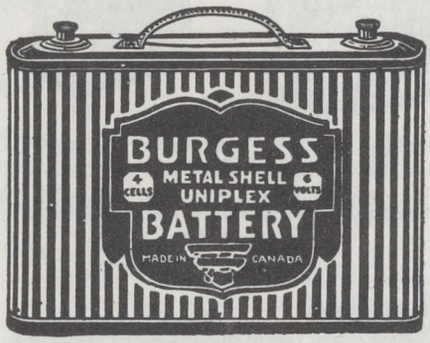
No. G3

No. G3—4½ volt Portable "A" Battery. Size 4" x 1⅜" x 4¹⁵⁄₁₆".
Retail Price.. 1.30



No. XX30

No. XX30 — 45 volts. Portable "B" Battery, Snap Fastener terminals. Size 2½" x ¹⁵⁄₁₆" x 3²³⁄₃₂".
Retail Price..... **2.75**



No. S461

For Ignition and Electric Fence Units. 6 volt Uniplex Size 10⅝" x 7¼" x 2¾".
Retail Price..... **3.85**

No. S561

No. S561—For General Ignition Service. 7½ volt Uniplex. Size 12⅞" x 7¼" x 2¾".
Retail Price..... **4.95**



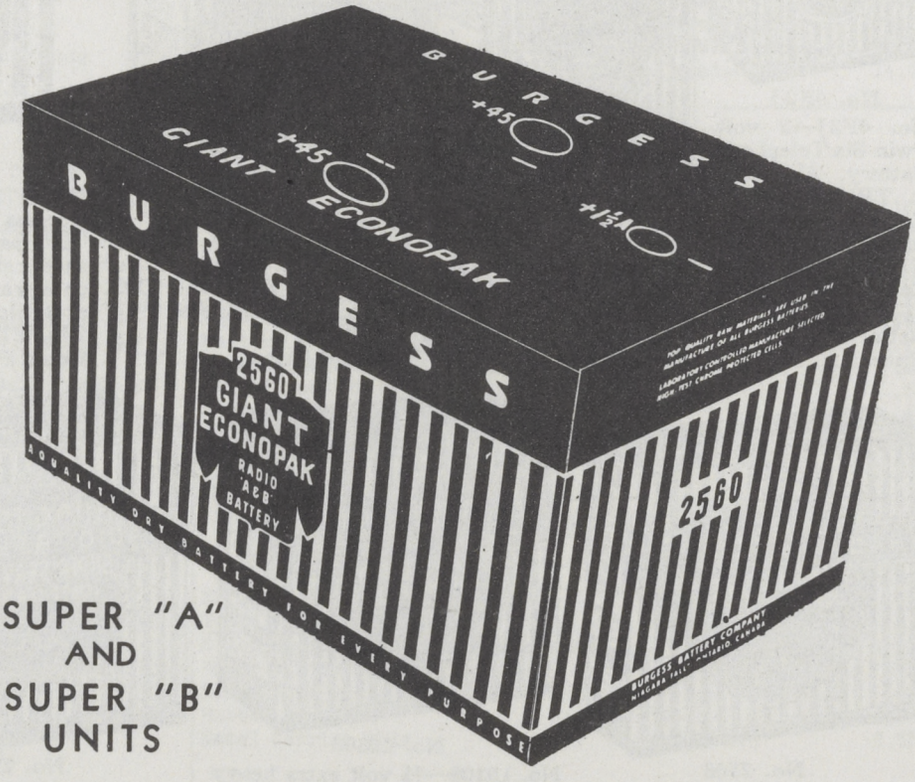
No. 6

No. 6 Telephone—1½ volt Dry Cell. Spring Clips or Binding Posts. Size 6" x 2½".
Retail Price..... **.80**



No. 6

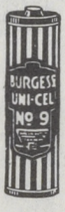
No. 6 Ignition—1½ volt Dry Cell. Size 6" x 2½".
Retail price..... **.80**



- SUPER "A" AND
- SUPER "B" UNITS



No. 1
Small Uni-Cel
Retail price
.15



No. 9
Penlite
Uni-Cel
Retail
Price
.10

1 1/2 Volt "A" and 90 Volt "B"
For all popular farm Radios.
Retail Price each $13.65

BURGESS



NEW FLASHLIGHT BATTERY

The ideal battery to use in all flashlights. It's chrome protected to give you EXTRA hours of bright light. It's new design ensures dependable FRESH POWER always. Every BURGESS battery is guaranteed by the maker.
Retail Price .15

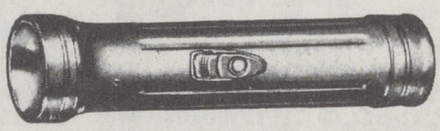
No. 226 Flashlight is a sturdy streamlined prefocussed flashlight with 1¾" head, all brass construction, with bumper block and safety lock switch, beautifully designed and finished in Maroon with Chrome trim. Uses two No. 2 – Size D Flashlight Batteries and one No. PR2 or PR6 Burgess Bulb.

Retail Price 2.15



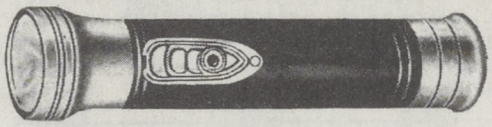
No. 228 Prefocussed two cell, brass barrel, chrome plated, safety lock switch, 1¾" head with highly polished reflector. Uses two No. 2 – Size D Flashlight Batteries and a PR2 or PR6 Bulb.

Retail Price 1.95



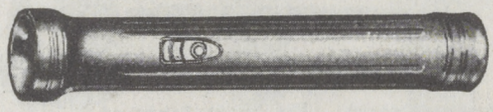
No. 327 Flashlight is a sturdy streamlined prefocussed flashlight with 1¾" head, all brass construction, with bumper block and safety lock switch, beautifully designed and finished in Maroon with Chrome trim. Uses three No. 2 – Size D Flashlight Batteries and one No. PR3 or PR7 Burgess Bulb.

Retail Price 2.50

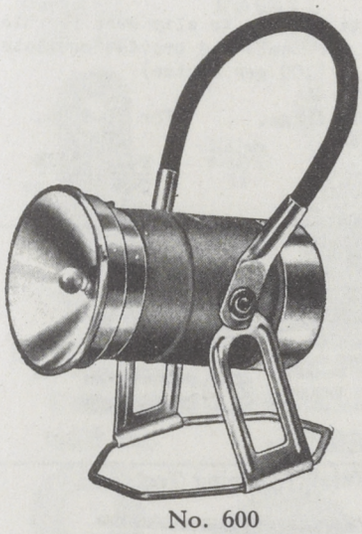


No. 328 Prefocussed three cell, brass barrel, chrome plated, safety lock switch, 1¾" head with highly polished reflector. Uses three No. 2 – Size D Flashlight Batteries and a PR3 or PR7 Bulb.

Retail Price 2.30

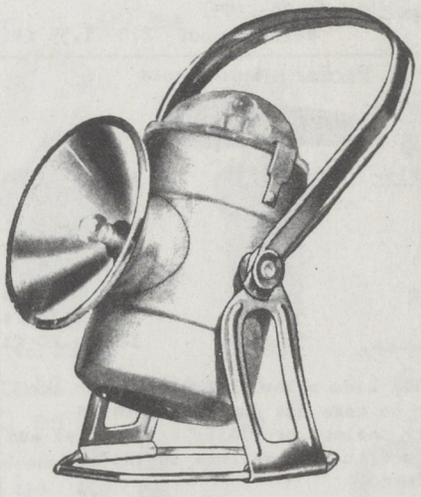


LANTERNS



No. 600

Retail Price 4.65



No. 400

Retail Price 5.30

400	Duo-Ray—Combination Broadbeam and Spot Light
600	Range Finder—1500 ft. Spotlight

Above Lanterns all use No. F4H LANTERN BATTERY

Equipped with Wings and Spring Contacts — To assure fit in all Lanterns and to avoid Blinking Light through poor Connections



No. 296 Penlite Display
Ten Penlites mounted on an Attractive Display Card

Retail Price .80

This attractive Merchandiser is bound to increase sales of Penlites. Refill with BURGESS Penlite Battery No. 9.

All prices listed are Retail

Packard Black



	NO.	PRICE
7mm 16 ga.(19x29) 100' spool	330	.15 ft



"Four-Forty" Cable, Packard's best seller

	NO.	PRICE
7mm 16 ga.(19x29) 100' spool	440	.15 ft

Lightning and Generator Cable Braided and Lacquered



Single Conductor, Tinned
100 ft. spools

		NO.	PRICE
16 ga.(19x29 OD .131)		50	.05 ft
14 " (19x27 OD .159)		52	.06 ft
14 " (19x27 OD .159)	Black	52B	.06 ft
14 " (19x27 OD .159)	Chrome	52C	.06 ft
14 " (19x27 OD .159)	Green	52G	.06 ft
14 " (19x27 OD .159)	Red	52R	.06 ft
14 " (19x27 OD .159)	Yellow	52Y	.06 ft
12 " (19x25 OD .184)		54	.08 ft
10 " (19x23 OD .209)		56	.12 ft
10 " (19x23 OD .209)	50' Sp.	56D	.12 ft

ACCESSORY CABLE



100 foot spool

Black lacquered. For short leads of 3 amperes or less on heaters, electric clocks, etc.(16 ga. generally preferred)

	NO.	PRICE
18 ga. 1-Cond.(16x30 OD .118)	48B	.05 ft

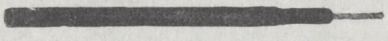
Generator Brush Lead



(Bare copper core, extra flexible)
50 foot spools

		NO.	PRICE
16 ga.(105x36 OD .090)	1 braid	63D	.08 ft
14 ga.(168x36 OD .125)	2 "	62D	.10 ft
12 ga.(259x36 OD .150)	2 "	64D	.13 ft

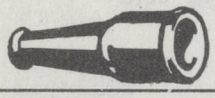
Electric Motor Lead Cable



Flexible, tinned copper core, black braid, paraffin finish - can be baked with field coil. 500 ft. spools

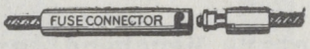
	NO.	PRICE
18 ga.(16x30 OD .152)	101G	.03 ft
14 " (19x29 OD .167)	102G	.05 ft
14 " (19x27 OD .190)	103G	.06 ft
12 " (19x25 OD .221)	104G	.08 ft

Spark Plug Protectors



NO.	PRICE
245	.21 ea

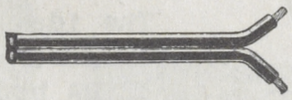
LINE FUSE CONNECTOR



Complete line fuse connector, unassembled (Fuse not included). 5 per pkg.

NO.	PRICE
153	.18 ea

Twin-Cord



Brown, Type "Posj"
100 ft. spools

	NO.	PRICE
18 ga. 2-Cond. (42x34 OD .135 x .235	119	.07 ft

Test Lead and Charging Cable



Extra Flexible
(Tinned Copper Conductors)
100 Ft. Spools.

	No.	Price
10 Ga(259x34 OD.242)	121	.12 ft
8 Ga(413x34 OD.272)	122	.15 "

STARTING CABLE



(Bare Copper Core-Concentric Stranding)
"A" Items - 25 ft. cartoned coils

	NO.	PRICE
2 ga.(127x23 OD .480) Weatherproof	265A	.45 ft
1 ga.(127x22 OD .493) Lacquered	266A	.55 ft
0 ga.(127x21 OD .538) Lacquered	267A	.65 ft
00 ga.(127x20 OD .583) Weatherproof	268A	.85 ft
000 ga.(259x22 OD .720) Weatherproof	269	1.10 ft
0000 ga.(418x23 OD .755) Weatherproof	270	1.35 ft

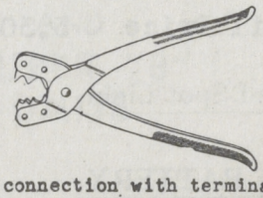
Packard Auto Loom



I.D. Size	Std. Pkg.	NO.	PRICE
3/16"	50 ft	1201	.09 ft
1/4"	50 ft	1203	.09 ft
5/16"	50 ft	1204	.10 ft
3/8"	50 ft	1205	.12 ft
1/2"	50 ft	1207	.13 ft
9/16"	50 ft	1208	.14 ft
3/4"	50 ft	1211	.20 ft

No. 1211 Loom makes it possible for the dealer to make his own loom-covered battery cables, providing extra sales and labor profit with savings in initial investment.

Terminal Tool



Used in connection with terminals other than Rajah. Does a thorough factory-like job.

NO.	PRICE
130	8.80 ea

Flex-O-Cord



Made to Underwriters' Specifications
Tough Synthetic Jacket.
100 ft. Spools.

	No.	Price
18 Ga. 2-Cond. Type S (42x34 OD. 405)	169	.20 ft
18 Ga. 2-Cond. Type SJ (42x34 OD. 305	170	.13 ft
16 Ga. 2-Cond. Type S (65x34 OD. 425	171	.24 ft
16 Ga. 3-Cond. Type S (65x34 OD .435)	175	.31 ft

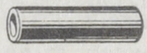
Lamp Cord



New Code - Green and Yellow (16x30 OD .240)

	NO.	PRICE
18 ga. 100 ft. spool	118	.07 ft

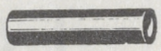
Line Connectors



To be used with tip terminal No. 236 for 14, 16 and 18 ga. cable.

	NO.	PRICE
Two Wire Connector	277	.16 ea

Terminal Sleeves

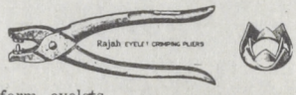


For 18 Gauge 243

High quality sleeves to slip over ferrule of primary terminals and provide complete insulation. (100 per carton)

	For 16-14-12 ga. 244	For 10-8 ga. 284
	NO.	PRICE
9/64" ID x 3/4"	243	.03 ea
3/16" ID x 1	244	.05 ea

Eyelet Crimping Tool



Used to form eyelets with Packard Terminal No. 240 for magneto connections, etc.



Price 4.50 Tr. No. 280

Rajah Crimping Tool



For cutting and stripping high-tension cable and attaching Rajah Crimp-Type Spark Plug Terminals.

Price 7.75 Tr. No. 226

Distributor Head Brush



A handy Tool for cleaning out corrosion in Distributor Head Towers.
No. 146 $1.70 Net

Primary, Secondary and Battery Terminals



No. 2
Elbow Type Universal Battery Terminal
Retail .39 ea



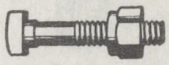
No. 5-U
Regular Weight Split Barrel Universal Battery Terminal
Retail .39 ea



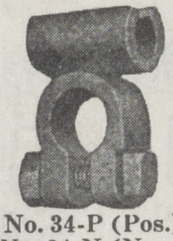
No. 6-U
Heavy Duty Split Barrel Universal Battery Terminal
Retail .51 ea



No. 15-C
Battery Bolt Nut With Shoulder
Retail .03 ea



No. 16-C
$\frac{5}{16}$" x 1½" With No. 15-C Nut
Retail .10 ea



No. 34-P (Pos.)
No. 34-N (Neg.)
Split Barrel Battery Terminal For 000 Ga. Cable
Retail .80 ea



No. 22-U
Straight Neck Bell-Type Universal Battery Terminal
Retail .55 ea



No. 17
Copper Lug $\frac{15}{32}$" I.D. $\frac{13}{32}$" Hole 150 Amp. For 0 or 00 Gauge
Retail .18 ea



No. 18
Copper Lug $\frac{13}{32}$" I.D. $\frac{13}{32}$" Hole 125 Amp. For 1 or 2 Gauge
Retail .14 ea



No. 19
Copper Lug $\frac{11}{32}$" I.D. $\frac{5}{32}$" Hole 90 Amp. For 3 or 4 Gauge
Retail .14 ea

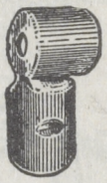


No. 203
7 MM Nickeled Thrust Terminal
Retail .05 ea

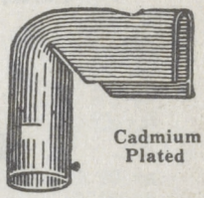


7 MM Nickeled Snap Terminal

No. 204
Retail .06 ea



No. 205
7 MM Cadmium Angle Terminal (Buick)
Retail .06 ea



Cadmium Plated

No. 205-A
7 MM Angle Solderless Terminal
Retail .06 ea



No. 216
Rajah - B/T-11 Thrust - 7 MM
Retail .05 ea



No. 217
Single Ear, $\frac{13}{64}$" Hole for 14-18 Ga. .030 Thick Cadmium Plated
Retail .04 ea



No. 218
Rajah - C/T-11 Snap - 7 MM
Retail .07 ea



No. 219
Rajah - R/A/C-11 Angle - 7 MM
Retail .09 ea



No. 212
Roll, $\frac{13}{64}$" Hole for 14-18 Ga. .030 Thick Tinned
Retail .03 ea



No. 213
Rubber Protectors 7 MM
Retail .06 ea



No. 214
Rajah - P/R Ring 7 MM
Retail .05 ea

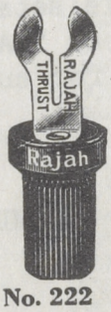


No. 224
Rajah S-SOS-11 Solderless
Retail .24 ea



No. 230
Copper Lug $\frac{5}{16}$" I.D $\frac{13}{64}$" Hole 35 Amp. For 8-10 Gauge
Retail .13 ea

Rajah T-SOS-11 Solderless



No. 222
Retail .20 ea

Rajah H-SOS-11 Solderless



No. 223
Retail .20 ea

Rajah R-SOS-11 Solderless



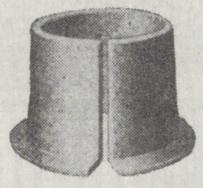
No. 221
Retail .18 ea



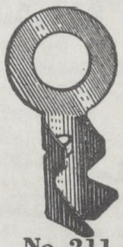
No. 227
Rajah A9-SOS-11 Solderless
Retail .29 ea



No. 228
Primary, $\frac{5}{32}$" Hole 14-18 Ga. Cadmium Plated
Retail .03 ea

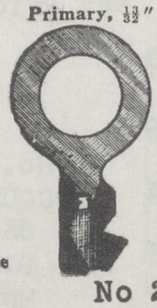


No. 135
Post Shim (soft lead)
Retail .05 ea



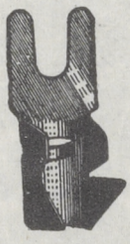
No. 211
Primary, $\frac{5}{32}$" Hole for 12-18 Ga. .030 Thick
Retail .04 ea

Primary, $\frac{13}{32}$" Hole for 10-12 Ga. .040 Thick Cadmium Plated



No 207
Retail .04 ea

Spade $\frac{13}{64}$" Opening for 12-18 Ga. .30 Thick Cadmium Plated



No 208
Retail .04 ea

Primary, $\frac{5}{32}$" Hole for 8-12 Ga. .040 Thick Cadmium Plated



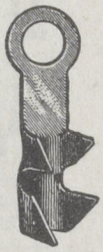
No 209
Retail .04 ea

Spade $\frac{11}{64}$" Opening for 12-18 Ga. Cadmium Plated



No 208A
Retail .03 ea

Primary, $\frac{7}{32}$" Hole for 10-12 Ga. 040 Thick Cadmium Plated



No. 206
Retail .04 ea

Primary, Secondary and Battery Terminals (Contd.)



No. 233
Rajah - HT-11 Hook Terminal
Retail .10 ea



No. 231
Rajah - S/R-11 Split Ring for Magnetos
Retail .06 ea



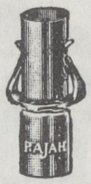
No. 236
Tip Terminal (Small)
Retail .03 ea



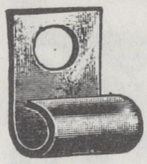
No. 239
Rajah - A/S/S-11 Angle Spring Snap Terminal
Retail .18 ea



No. 237
Tip Terminal (Large)
Retail .04 ea



No. 238
Rajah - S/S-11 Spring Snap Terminal
Retail .15 ea

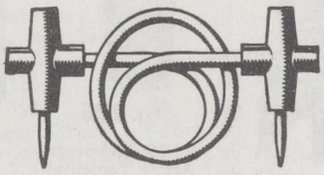


No. 229
Heavy Roll Lug 7/32" Hole, 6-12 Ga. .050 Thick Cadmium Plated
Retail .06 ea



No. 240
Rajah Eyelet Terminal
Retail .03 ea

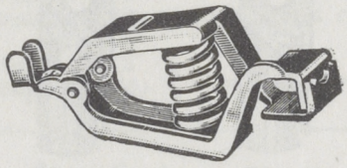
"Shuro" Charging Connector



Pin Type 14" in length.
No. 136 Retail Each. .35

Battery Charging Clips

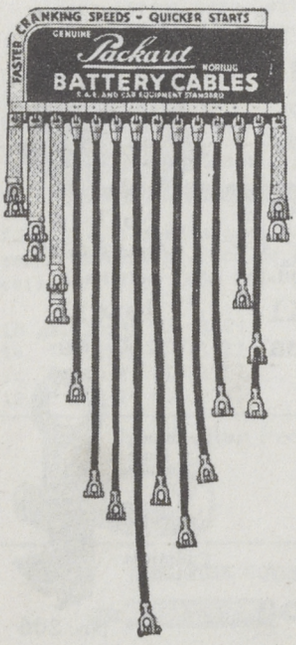
Non-corrosive plated, rugged, positive contact. No. 137-A used for test purposes. Marked (+) positive and (—) negative. 5 pairs in a carton.



	Jaw Spread	Retail Each
No. 137	10 Amp-1/2"	.14
No. 138	25 Amp-1"	.15
No. 139	50 Amp-1 1/4"	.27

MERCHANDISER GROUP NO. 22-X
19 fast moving Brass Terminal battery Cables, will take care of 95% of normal requirements.

MERCHANDISER NO. 22-L
18 fast moving LeadAlloy Battery Cables, will take care of 95% of normal requirements.



No. 22-X
One each of the following.

1U-12	1U-38	5U-7
1U-16	1U-41	5U-9
1U-19	1U-48	5U-11
1U-23	1U-53	5U-13
1U-27	1U-58	5U-16
1U-30	1U-65	CP-14
1U-34		

Net Price $21.35

No. 22-L
One each of the following.

1L-12	1L-34	1L-65
1L-16	1L-38	5L-7
1L-19	1L-41	5L-9
1L-23	1L-48	5L-11
1L-27	1L-53	5L-13
1L-30	1L-58	5L-16

Net Price $21.45

Ignition Cable Set Groups

Attractive counter display of 8 fast-moving ignition cable sets--made with either "FOUR-FORTY" or "LACQUERED" Cable. A real must for any Garage.



No. 470-C
FOUR-FORTY CABLE.

446E	(3)
446G	(3)
448D	(1)
448F	(1)

Net Price $18.50

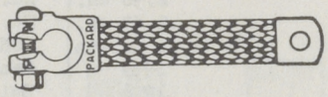
No. 471-C
LACQUERED CABLE.

6E	(3)
6G	(3)
8D	(1)
8F	(1)

Net Price $17.55

Leaded Brass (U) Terminals — Lead Alloy (L) Terminals





No. 1U-12	1.15 ea.
No. 1L-12	1.25 ea.
LENGTH 12½ in.	1 in Carton
American Bantam	1940
Buick-44-45-47	1948
Buick-49	1942
Buick-44 & 46	1940
Buick-48 & 49	1940-38
Buick-All 6	1930-28
Cadillac-V8-All	1948-41
Cadillac-V8-75	1941-39
Crosley	1949-46
Fraser	1949
Kaiser	1949
LaSalle-All	1941
Lincoln & V-12 Zephyr	1948-39
Packard-901-2-3-4	1932
Pontiac-8	1938
and others	
No. 1U-16	1.25 ea.
No. 1L-16	1.35 ea.
LENGTH 16½ in.	1 in Carton
American Bantam	1939
Buick-44-45-47	1949
Buick-44-45-46-47	1947-41
Buick-45 & 47	1940
Buick-44-46	1939-38
Buick-47	1950
Cadillac-60S-61	1940-39
Cadillac-60-65-75	1938
Chrysler	1949
DeSoto	1949
Dodge	1949-46
Ford-85 & Mercury	1948-39
Hudson-112	1939-38
La Salle-V8	1938
Lincoln-Cosmopolitan	1949
Lincoln-Zephyr	1938
Monarch	1949-46
Meteor	1949
Nash-600 Amb	1949
Oldsmobile-6	1948-40
Oldsmobile-8	1948-41
Oldsmobile-All	1939-38
Plymouth-All	1949-46
Pontiac-6	1948-39
Pontiac-8	1948-39
Studebaker-Champ. 6	1942-41
Studebaker-Comm. 6	1940-39
Studebaker-Pres. 8	1939
Willys	1942-37
and others	
No. 5U-9	.75 ea.
No. 5L-9	.85 ea.
LENGTH 9½ in.	5 in Carton
Buick-44, 45, 47	1949-48
Buick-44, 46, 48, 49	1937-36
Buick-48, 49	1935-33
Buick-45, 46, 48, 49	1932
Buick-341-353	1930-28
Chevrolet-All	1939-37
Hudson-6 & 112	1939
Hudson-6	1936-35
Hudson-8	1936-34
Hupmobile-All	1939-37
Hupmobile-417	1934
Lafayette	1941
LaSalle	1939
LaSalle	1937
Nash-All	1948
Nash-6 & 8	1941
Nash-Late 6 & 8	1939
Packard 6 & 8	1941-40
Packard-6-115 & 8-120 & V12	1937
Pierce-Arrow-8 & 12	1938-36
Reo-All 6	1934-31
Studebaker-8	1931-30
Terraplane-6	1938-34

No. 1U-23	1.55 ea.
No. 1L-23	1.65 ea.
LENGTH 23½ in.	1 in Carton
Cadillac-90	1940
Chrysler-6	1948-42
Chrysler-All	1941
DeSoto-6	1948-41
Dodge-6	1948-41
Ford-V8-40	1934-33
Ford-8	1949
Franklin-12	1934-32
Fraser	1949
Graham-All	1939-38
Kaiser	1949
Lafayette-6	1937-36
Lincoln-V-12	1941-39
Meteor	1949
Nash-Amb. 8	1936
Nash-8-3590	1935
Nash-All	1934-33
Nash-880-890-980-990-1080-1090	1932-31
Oldsmobile-All	1938
Packard-2101-2111-St.8-Super 8	1949-46
Packard-6 (exc.110-2020)	1948-42
Plymouth-6	1948-41
Pontiac-8	1950-49
Pontiac-6, 25 Can.	1939
Studebaker-Comm. 6	1942-41
and others	
No. 1U-27	1.65 ea.
No. 1L-27	1.70 ea.
LENGTH 27 in.	1 in Carton
Chevrolet-All(Except Std.)	1936-26
Chrysler-6	1949 & 42
Chrysler-8	1948-42
Chrysler-All	1940
Desoto-All	1942 & 40
DeSoto	1949
Dodge-All	1942
Dodge-6	1940
Ford-V8-48	1936-35
Ford-V8-18	1932
Ford-6	1949
Frazer	1948-47
Graham-All	1940-33
Hudson-Country Club 6	1939
Hudson-6 & 8	1939-38
Hudson-All	1937
Hudson-6	1935
Hudson-8	1935-34
Kaiser	1948-47
Lafayette-6 (Early)	1939
Lafayette-6	1938
LaSalle-All	1933-32
Lincoln-V-12	1938-32
Nash-6 Early	1939
Nash-Amb. 6	1937
Nash-Std. 6	1930-27
Oldsmobile-6	1950-49
Oldsmobile-6	1932-29
Packard-All 8	1949-46
Packard-6 (Exc. 110-2020)	1948-42
Packard-8-2003-2006	1942
Plymouth-All	1942
Plymouth-6	1940
Plymouth-All	1934-33
Plymouth-All	1931-28
Pontiac-All Exc.20-22	1950-49
Pontiac-All 6	1936-35
Pontiac-All 8	1936-32
Pontiac-All	1930-28
Studebaker-8	1942-41
Studebaker-6	1934-31
Terraplane-6	1938-37
Terraplane-6	1935-34
Willys-Civ."Jeep"	1947-46
and others	

No. 1U-30	1.75 ea.
No. 1L-30	1.80 ea.
LENGTH 30 in.	1 in Carton
Chevrolet-Std.	1936
Chrysler-8	1949 & 42
DeSoto-6	1932
DeSoto-8	1931
Ford-T	1927-20
Hudson-6 & 8	1949-48
Hudson-6 & 8	1936
Nash-8	1938
Nash-6-3520 & 8-3580	1935
Plymouth-All	1939
Plymouth-(Late)	1931
Pontiac-All	1937
Pontiac-6-26	1938
Pontiac-6-20-22	1950-49
Studebaker-All	1949-47
Studebaker-6	1934-31
and others	
No. 1U-34	1.90 ea.
No. 1L-34	2.00 ea.
LENGTH 34 in.	1 in Carton
Cadillac-V16-90	1937-30
Cadillac-All	1935-34
Cadillac-V8	1931
Chrysler-All	1941
Chrysler-Cust.Imp.8	1939
Chrysler-All	1938
Chrysler-All	1935
Chrysler-All 6	1934
DeSoto-6	1941
DeSoto-6w/over drive	1939
DeSoto-6	1938
DeSoto-All 6	1935
DeSoto-6	1931
Dodge-6	1941
Dodge-6	1938
Dodge-6	1934
Ford-6	1948-41
Hudson-6	1942-40
Nash-600	1949
Nash-8(Early)	1939
Nash-All	1938
Nash-8	1937
Nash-Amb.6	1936
Nash-3520-3580	1935
Nash-960-970-1060-1070	1932
Plymouth-6	1941
Plymouth-All	1938
Plymouth-All	1932
Pontiac-All	1931
Studebaker-Pres.8	1931-30
Terraplane-6	1936
Willys	1934-30
and others	
No. 1U-19	1.40 ea.
No. 1L-19	1.45 ea.
LENGTH 19 in.	1 in Carton
Bantam (Austin)	1938-30
Buick-44-45	1950
Dodge	1949
Ford-All 8	1939-37
Ford-A-AA	1931-28
Frazer	1948-47
Graham-107 & 108	1940
Kaiser	1948-47
Lafayette-6	1935-34
Lincoln & V-12 Zephyr	1948-40
Oldsmobile-8	1949
Oldsmobile-All	1940-39
Packard-2103-2106 Custom 8	1949-46
Packard-8-160-180-2003-2006	1942
Plymouth	1949
Studebaker-Comm.-Pres.	1940
Willys-Sta. Wagon"Jeep"	1949-47
and others	

No. 1U-48	2.50 ea.
No. 1L-48	2.55 ea.
LENGTH 48 in.	1 in Carton
Buick-48-49	1937
Buick-All	1936
Buick-40-60-80-90	1933-35
Buick-8-50	1930-31
Cadillac-62-72	1940
Chevrolet-Std	1935
Chrysler-All 6	1934
Chrysler-All 8	1932-33
DeSoto-All 6	1932-33
Dodge-6	1932-34
Graham-6-95-116-120	1937
Graham-6-90-110	1936
Hudson-6	1933
Hudson-8	1932-33
Lafayette-All	1941
Lafayette-6	1934-35
LaSalle	1940
Nash-6-600	1942
Nash-8	1939
Nash-8	1937
Nash-960-970-1060-1070	1932
Nash-660-870	1931
Packard--Light 6 & 8	1937
Packard - 8	1936
Packard-120	1935-36
Plymouth-All	1932-33
Reo-6	1930-36
Studebaker-All	1938
Studebaker-Dict. 6, Pres. 8	1935-36
Studebaker-56-6	1934
and others	

No. 5U-11	.90 ea.
No 5L-11	.95 ea.
LENGTH 11 in.	5 in Carton
Cadillac - 61-63-67-75	1946
Cadillac - 61-63-72	1942
Cadillac - All (Except 60)	1941
Cadillac - 62-72	1940
Chevrolet-Mstr. & Std.	1935
Chevrolet-Master	1936
Chevrolet-Series 10-12	1937-39
Ford-V8-48	1935-36
Ford-All	1932
Graham	1930-37
Hudson-6	1939
LaSalle-V8	1939-41
Nash-Late 6 & 8	1939-40
Packard-Super 8	1937
Packard-Super 8-12	1935-36
Pierce-Arrow-All	1936-38
Pontiac-8	1935-36
Pontiac-6 cyl.U.S.A.& Can.	1935-36
Pontiac-6 cyl.Canada	1937-39
Studebaker-Pres.8	1936
Studebaker-Dict. 6	1935-36
Studebaker-Dict.Pres.-Comm.8	1934-36
Terraplane	1934-38
Willys-77	1933-35
and others	

No. SS-18	1.60 ea.
LENGTH 18 in.	1 in Carton
Crosley	1940
Ford-All 8	1937-46
Lincoln-Zephyr	1938
Nash-All	1937
Studebaker-Comm.6	1941
and others	

No. 5U-7	.65 ea.
No. 5L-7	.75 ea.
LENGTH 7½ in.	5 in Carton
Bantam and Austin	1940-30
Buick-48-49	1936
Cadillac-60-65-75	1938
Cadillac-V8-60	1937
Chevrolet-All	1935-25
Ford-All 8 & Mercury	1948-37
Hudson-All	1947-40
Hudson-112	1938
Hudson-8	1936
Lafayette-6 (late)	1940-39
LaSalle-V-8	1938
Mercury-All	1946-40
Monarch-A-118	1948-46
Nash-All	1947-42
Nash-400	1936
Oldsmobile-6 & 8	1937-36
Oldsmobile	1935-33
Packard - 110-120-160-180	1942
Packard-All	1939-38
Packard-120	1936-35
Packard-(Except 901-2-3-4)	1934-28
Pierce-Arrow-All	1938
Studebaker-6 & 8	1942-37
Studebaker-56-6	1934
Studebaker-6 & 91-92	1934-31
Terraplane-112	1938
Willys-6 & 8	1934-30
and others	

No. 1U-65	3.35 ea.
No. 1L-65	3.40 ea.
LENGTH 65½ in.	1 in Carton
Auburn-852	1936
Cadillac-60-65-70	1937
Chrysler-Cust. Imp. 8	1940
Chrysler-Royal 6	1939
Chrysler-All	1936
DeSoto-6	1936
Dodge-6	1936
Hupmobile-8	1939-37
Hupmobile-427-527-621	1936-34
LaSalle	1937-34
Nash-6	1939-38
Nash-6	1936
Packard-Super 8	1942
Packard-Super 8	1941-40
Packard	1934-32
Plymouth-All	1936
and others	

No. EG-8	.45 ea.
LENGTH 8½ in.	10 in Carton
Buick-All	1940-33
Cadillac-V8	1948-41
Chevrolet-All	1936-29
Crosley	1948-39
Ford-All 8	1948-37
Frazer	1948-47
Graham-All	1937-33
Hudson-All	1939-32
Hupmobile-All	1936-34
Kaiser	1948-47
Lafayette	1941-39
Oldsmobile-6	1940-38
Oldsmobile-8	1939-35
Packard-All	1939-33
Pontiac-All	1937-30
Studebaker-All (Except Pres.8)	1948-39
Studebaker-All	1938
Terraplane-All	1938
and others	

No. 5U-13	1.00 ea.
No. 5L-13	1.05 ea.
LENGTH 13½ in.	5 in Carton
Auburn-6	1936-34
Auburn-All 8	1935-34
Auburn-All	1935-28
Buick-44-45	1947-41
Buick-44	1940-38
Cadillac-90	1940
Cadillac-V8-75	1940-39
Cadillac-V16	1939-38
Cadillac-All	1937-31
Chevrolet	1950-49
Crosley	1942-39
Ford-V8-40	1934
Graham-109	1940
Hudson-6 & 8	1949-48
Hudson-Ctry. Club 6	1939
Hudson-6 & 8	1938
Hudson-8	1937
Hupmobile-111	1940
Hupmobile-All (Except 417)	1936-34
LaSalle-All	1936-27
Lincoln-V12	1941-38
Willys-Civ."Jeep"	1948-46
and others	

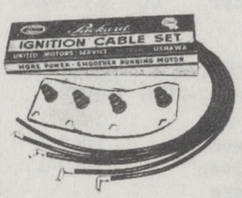
No. 5U-16	1.10 ea.
No. 5L-16	1.15 ea.
LENGTH 16½ in.	5 in Carton
Auburn-852	1936
Cadillac-V8-60S-62	1946
Cadillac-60-60S-61	1939-42
Chevrolet-10-12	1940-47
Ford-6	1941-46
Ford-V8-40	1933
Hudson-6	1937
Oldsmobile-6 & 8	1941-47
Pontiac-6 & 8 USA	1938-39
Pontiac-6 Can.& USA-8 cyl.	1940-46
Willys	1937-42
and others	

No. SS-32	1.80 ea.
LENGTH 32½ in.	1 in Carton
Ford-All	1936-32
Lafayette	1941-39
Nash-Amb. 6	1940
Studebaker-Champ. 6	1940-39

No. 1U-53	2.70 ea.
No. 1L-53	2.75 ea.
LENGTH 53 in.	1 in Carton
Buick-44-46	1937
Cadillac-V-16	1939-38
Chrysler-All	1935-34
DeSoto-6	1935-34
Lafayette	1940-36
LaSalle	1939
Nash-6 & 8 Amb.	1947-41
Nash-6-3520 & 8-3590	1935
Packard-6-110-2020	1942
Packard-8-120-2001A	1942
Packard-6	1933
Packard-Super 8	1938-37
Plymouth-All	1935
and others	

No. EG-12	60 ea.
LENGTH 12 in.	10 in Carton
Cadillac-V8-62-72	1940
Cadillac-All	1938
LaSalle-All	1939-38
Pontiac-All	1938
and others	

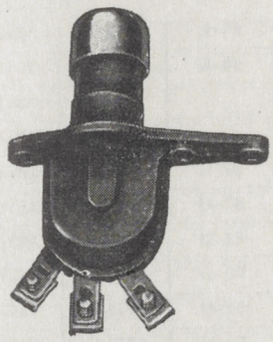
IGNITION CABLE SETS FOR TRACTORS



Make of Tractor	Models used on	Retail Price
444-T		
Case	D,DC,DO,DI,LA.	prices on application
Ford&Furgeson	All	
Oliver	1828, Std. 80, Kletrack HG	
446-E		
Massey-Harris	101 Sr.	3.40

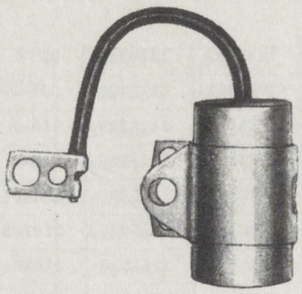
Make of Tractor	Models used on	Retail Price
446-G		
Oliver	RC Std., Ind. 77	2.60
444-U		
Allis Chalmers	B,IB,C,RC,R,W,WC,WD, WF.	
IHC. (Farmall)	A,B,C,M,MD,H,HV,Cub,Sup.	prices on application
Case	S,SC,SE,SO,Y,VC,VI	

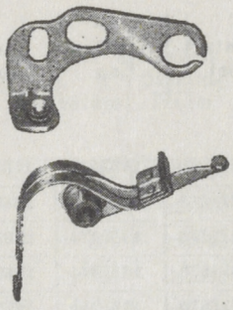
ALL ORDERS RECEIVE CAREFUL ATTENTION.



DIMMER SWITCH

CONDENSERS

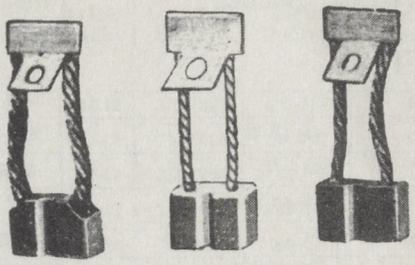




CONTACT SETS



ROTORS

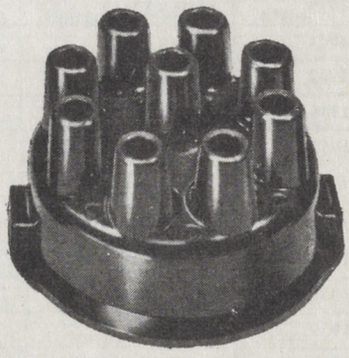


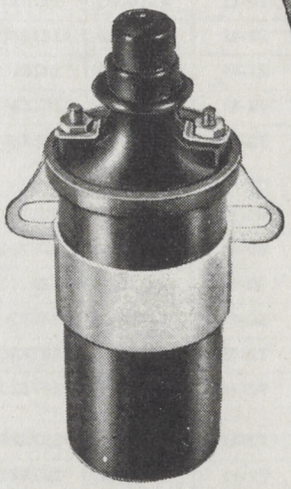
BRUSHES, Cranking Motor

DELCO-REMY

ELECTRICAL EQUIPMENT

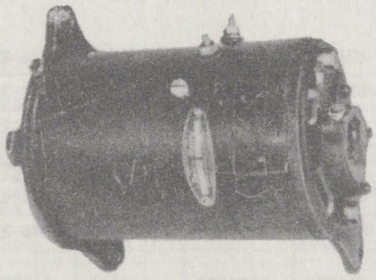
CAPS, Distributor



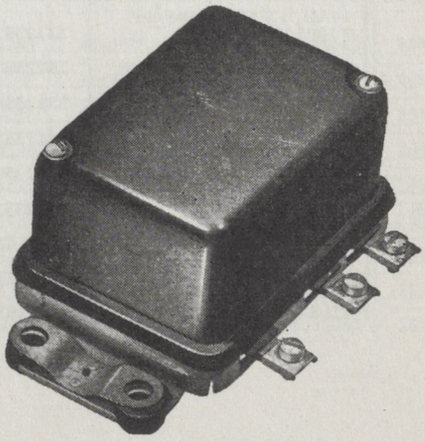


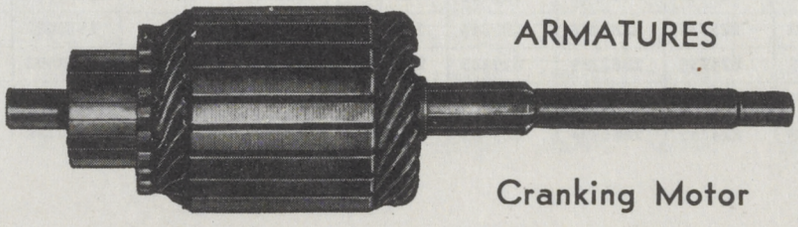
COILS, Ignition

GENERATORS (Universal)



REGULATORS, Generators





ARMATURES

Cranking Motor

D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

CAR APPLICATION — Delco-Remy POPULAR PARTS

Year	MODEL	Distributor	Contact Set	Distributor Cap	Condenser	Rotor	Ignition Coil	Generator	Universal Generator	Armature	Brush Set Generator
BUICK											
1936	44	663-F	1871869	1837974	1869705	1836893	1115326	936V	60-U	1871826	1857963
	46-48-49	663-E	1871869	1837974	1869705	1836893	1115326	936-W	60-U	1871826	1857963
1937	44	1912414	1871870	1837974	1869704	1836893	1115326	918-B		1866410	1857963
	46-48-49	663-Z	1871870	1837974	1869704	1836893	1115326	918-A		1866410	1857963
1938	44	1868671	1871870	1837974	1869704	1836893	1115326	1101052	52-U	1871826	1857963
	46	1868671	1871870	1837974	1869704	1836893	1115326	1101053	52-U	1871826	1857963
	48-49	1868671	1871870	1837974	1869704	1836893	1115326	1101055	52-U	1871826	1857963
1939	44	1868671	1871870	1837974	1869704	1836893	1115326	1101052	52-U	1871826	1857963
	46	1110805	1871870	1837974	1869704	1836893	1115326	1101053	52-U	1871826	1857963
	48-49	1110805	1871870	1837974	1869704	1836893	1115326	1101055	52-U	1871826	1857963
1940	44-45	1868671	1871870	1837974	1869704	1836893	1115026	1102662	62-U	1877806	1878249
	46-47-48-49	1110805	1871870	1837974	1869704	1836893	1115026	1102668	62-U	1877806	[9]1878249
1941	42-44-45	1868671	1871870	1837974	1869704	1836893	1115026	1102679	62-U	1877806	[9]1878249
	46-47-49	1868671	1871870	1837974	1869704	1836893	1115026	1102668	62-U	1877806	[9]1878249
1942	44-45	1868671	1871870	1837974	1869704	1836893	1115026	1102679	62-U	1877806	[9]1878249
	46-47-49	1868671	1871870	1837974	1869704	1836893	1115026	1102668	62-U	1877806	[9]1878249
1946-48	44-45	1868671	1871870	1837974	1869704	1836893	[2]1115026	1102679	62-U	1877806	[9]1878249
	47	1868671	1871870	1837974	1869704	1836893	[2]1115026	1102668	62-U	1877806	[9]1878249
1949	44	1110801	1871870	1837974	1869704	1836893	1115328	1102679	62-U	1877806	[9]1878249
	45	1110815	1871870	1837974	1869704	1836893	1115328	1102709		1912599	[9]1878249
	47	1110815	1871870	1837974	1869704	1836893	1115328	1102708		1912599	[9]1878249
CHEVROLET PASSENGER											
1936	Master	645-T	1855720	824735	1869704	820445	538-Z	936-U	60-U	1871826	1857963
	Standard	645-T	1855720	824735	1869704	820445	538-Z	936-U	60-U	1871826	1857963
1937	Master and Std. Deluxe	1110008	1855720	824735	1869704	820445	538-Z	960-G	60-U	1871826	1857963
1938	Series 10-12	1110008	1855720	824735	1869704	820445	538-Z	1100004	60-U	1871826	1857963
1939	Series 10-12	1110008	1855720	824735	1869704	820445	538-Z	1100004	60-U	1871826	1857963
1940	Series 10-12	1112353	1855720	824735	1900272	820445	1115025	1102667	72-U	1879002	[9]1878249
1941	Series 10-12	1112353	1855720	824735	1900272	820445	1115025	1102667	72-U	1879002	[9]1878249
1942	Series 10-12	1112353	1855720	824735	1900272	820445	1115025	1102667	72-U	1879002	[9]1878249
1946-48	Series 10-12	1112353	1882391	824735	1882239	820445	[5]1115025	1102667	72-U	1879002	[9]1878249
1949	Series 10-12	1112353	1855720	824735	1869704	820445	1115380	1102667	72-U	1879002	[9]1878249
CHEVROLET TRUCK											
1936	RB-RA-RD-RH-RJ-RK	645-T	1855720	824735	1869704	820445	538-Z	936-U	60-U	1871826	1857963
1937	GC-SH-SA-SD	1110008	1855720	824735	1869704	820445	538-Z	960-G	60-U	1871826	1857963
1938	13-14-15	1110008	1855720	824735	1869704	820445	538-Z	1100004	60-U	1871826	1857963
1939	13-14-15-18	1110008	1855720	824735	1869704	820445	538-Z	1100004	60-U	1871826	1857963
1940-44	13-14-15	1112353	1855720	824735	1900272	820445	1115025	1102667	72-U	1879002	[9]1878249
	18	1112353	1855720	824735	1900272	820445	538-Z	1102667	72-U	1879002	[9]1878249
1945	14All, 13-15 before ser. T100120	1112353	1855720	824735	1900272	820445	1115025	1102667	72-U	1879002	[9]1878249
1945	13-15 after ser. T100120	1112353	1882391	824735	1882239	820445	1115025	1102667	72-U	1879002	[9]1878249
1946	11-13-14-15	1112353	1882391	824735	1882239	820445	1115025	1102667	72-U	1879002	[9]1878249
	All 6V city service	1112353	1882391	824735	1882239	820445	1115025	1106403		1880252	1856494
	18	1112353	1882391	824735	1882239	820445	538-Z	1102667	72-U	1879002	[9]1878249
1947-48	11-13-14-15-18	1112353	1882391	824735	1882239	820445	1115380	1102667	72-U	1879002	[9]1878249
	All 6V city service	1112353	1882391	824735	1882239	820445	1115380	1102677		1879002	[9]1878249
1949	11-13-14-15-18	1112353	1855720	824735	1869704	820445	1115380	1102667	72-U	1879002	[9]1878249
	All 6-Volt City Service	1112353	1855720	824735	1869704	820445	1115380	1102677		1881309	[9]1878249

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

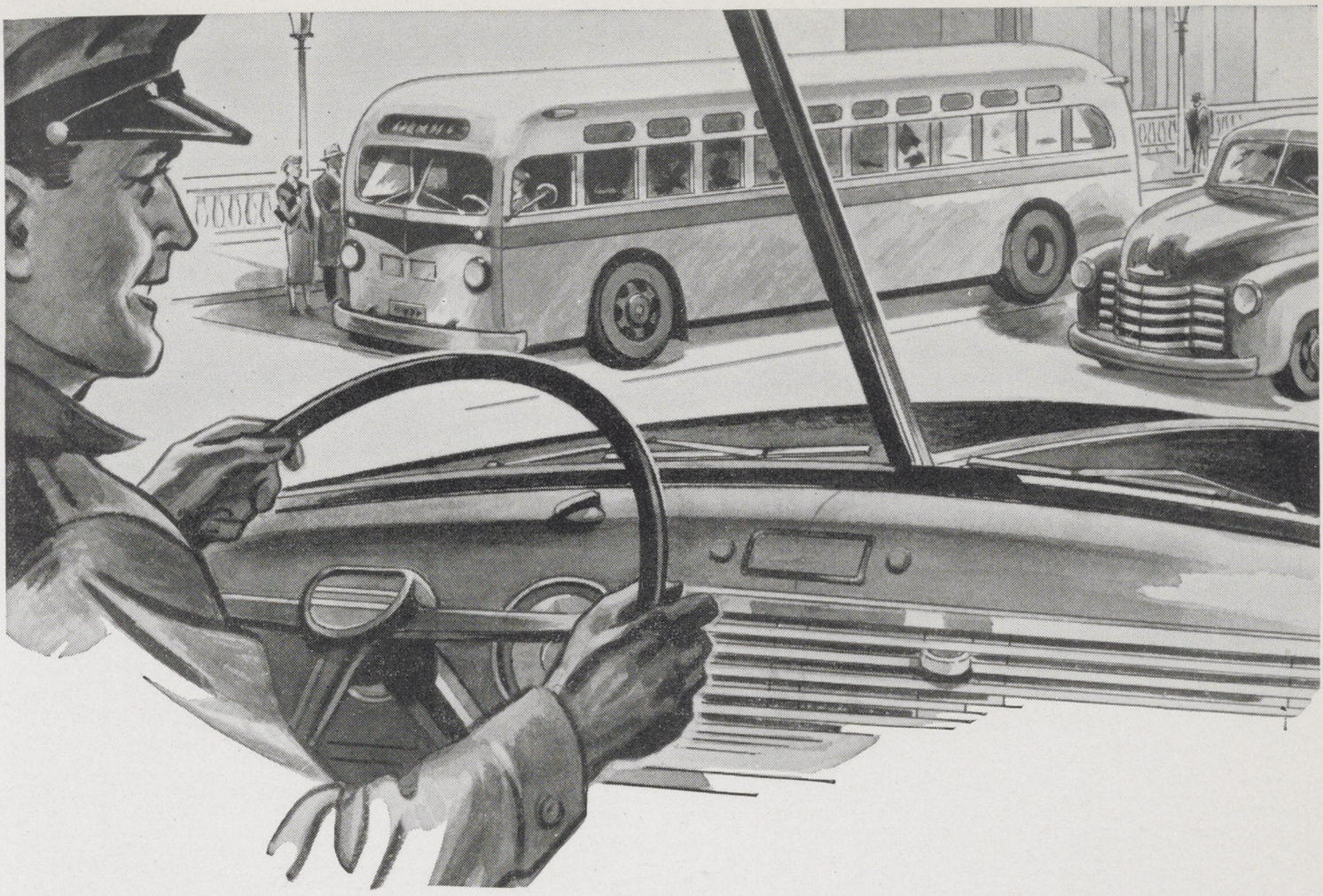
Delco-Remy POPULAR PARTS CAR APPLICATION

Year	MODEL	Spring Generator Brush	Relay or Regulator	Starting Motor	Armature	Brush Starting Motor	Starter Drive Clutch or Bendix	Starter Switch	Dimmer Switch	Light Switch	Stop Light Switch
BUICK											
1936	44	[1]1850760	1118315	734-Z	823881	811553	1874156	1542	1997008	479-M	4760
	46-48-49	[1]1850760	1118315	727-W	820158	811553	1874156	1542	1997008	479-N	4760
1937	44	[1]1850760	1118315	734-Z	823881	811553	1874156	1542	1997008	480-W	4760
	46-48-49	[1]1850760	1118315	727-W	820158	811553	1874156	1542	1997008	480-W	4760
1938	44	[1]1850760	1118315	734-Z	823881	811553	1874156	1542	1997008	1994501	4760
	46	[1]1850760	1118315	727-W	820158	811553	1874156	1542	1997008	1994501	4760
	48-49	[1]1850760	1118315	727-W	820158	811553	1874156	1542	1997008	1994501	4760
1939	44	[1]1850760	1118309	1107005	1867897	811553	1873789	1542	1997008	1994508	4760
	46	[1]1850760	1118309	1107908	820158	811553	1873789	1542	1997008	1994508	4760
	48-49	[1]1850760	1118309	1107908	820158	811553	1873789	1542	1997008	1994508	4760
1940	44-45	1878184	1118242	1107005	1867897	811553	1873789	1542	1997008	1995008	4760
	46-47-48-49	1878184	1118242	1107908	820158	811553	1873789	1542	1997008	1995008	4760
1941	42-44-45	1878184	1118242	1107005	1867897	811553	1873789	1542	1997008	1995016	4766
	46-47-49	1878184	1118242	1107908	820158	811553	1873789	1542	1997008	1995016	4766
1942	44-45	1878184	1118242	1107049	1867897	811553	1873789	1118019	1997008	1995016	4766
	46-47-49	1878184	1118242	1107929	820158	811553	1873789	1118019	1997008	1995016	4766
1946-48	44-45	1878184	1118242	1107049	1867897	811553	1873789	[29]1118019	1997008	1995016	4766
	47	1878184	1118242	1107929	820158	811553	1873789	[29]1118019	1997008	1995016	4766
1949	44	1878184	1118301	1107049	1867897	811553	1873789	1118019	1997008	1995016	4766
	45	1878184	1118357	1107078	1867897	811553	1873789	1118019	1997008	1995031	4766
	47	1878184	1118357	1107953	820158	811553	1873789	1118019	1997008	1995031	4766
CHEVROLET PASSENGER											
1936	Master	[1]1850760	1118309	738-G	1847432	811553	1859020	362941	1997008	485-Z	476-S
	Standard	[1]1850760	1118309	738-G	1847432	811553	1859020	362941	1997008	1995040	476-S
1937	Master and Std. Deluxe	[1]1850760	1118309	739-A	1847432	811553	1859020	362941	1997008	1995040	476-S
1938	Series 10-12	[1]1850760	1118309	1107009	1867897	811553	1873789	820052	1997008	485-Z	476-S
1939	Series 10-12	[1]1850760	1118309	1107009	1867897	811553	1773789	820052	1997008	1994007	476-S
1940	Series 10-12	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1994016	476-S
1941	Series 10-12	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1994022	1997725
1942	Series 10-12	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1994022	1997901
1946-48	Series 10-12	1878184	1118242	1107061	1867897	811553	1873789	820052	1997008	[4]1994022	1997901
1949	Series 10-12	1878184	1118301	1107075	1867897	811553	1873789	1118135	1997008	1995031	1997901
CHEVROLET TRUCK											
1936	FB-RA-RD-RH-RJ-RK	[1]1850760	1118309	738-G	1847432	811553	1859020	362941	1997008	479-P	474-Y
1937	GC-SH-SA-SD	[1]1850760	1118309	739-A	1847432	811553	1859020	362941	1997008	485-Z	476-S
1938	13-14-15	[1]1850760	1118309	1107009	1867897	811553	1873789	820052	1997008	485-Z	476-S
1939	13-14-15-18	[1]1850760	1118309	1107009	1867897	811553	1873789	820052	1997008	1995040	476-S
1940-44	13-14-15	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1995040	[6]1997901
	18	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1995040	[7]1997901
1945	14All, 13-15 before ser. T100120	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1995040	1997901
1945	13-15 after ser. T100120	1878184	1118242	1107061	1867897	811553	1873789	820052	1997008	1995040	1997901
1946	11-13-14-15	1878184	1118242	1107061	1867897	811553	1873789	820052	1997008	1995040	1997901
	All 6V city service	[1]1850760	1118352	1107061	1867897	811553	1873789	820052	1997008	1995040	1997901
	18	1878184	1118242	1107061	1867897	811553	1873789	820052	1997008	1995040	1997901
1947-48	11-13-14-15-18	1878184	1118242	1107061	1867897	811553	1873789	820052	1997008	1995031	1997901
	All 6V city service	1878184	1118349	1107061	1867897	811553	1873789	820052	1997008	1995031	1997901
1949	11-13-14-15-18	1878184	1118301	1107055	1867897	811553	1873789	820052	1997008	1995031	1997901
	All 6-Volt City Service	1878184	1118349	1107075	1867897	811553	1873789	820052	1997008	1995031	1997901

D. ACKLAND & SON, Limited
Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

CAR APPLICATION — Delco-Remy POPULAR PARTS

Year	MODEL	Distributor	Contact Set	Distributor Cap	Condenser	Rotor	Ignition Coil	Generator	Universal Generator	Armature	Brush Set Generator
GMC TRUCK											
1937	T14-T15-T16-T16H-F16H	1110023	1855720	824735	1869704	820445	538-Z	960-G	60-U	1871826	1857963
1938	93-94-95-96-97	1110023	1855720	824735	1869704	820445	538-Z	1100004	60-U	1871826	1857963
1939	93-94-95-96-98	1110008	1855720	824735	1869704	820445	538-Z	1100004	60-U	1871826	1856963
1940	93-94-95-96	1112353	1855720	824735	1900272	820445	1115025	1102667	72-U	1879002	91878249
	96H	1110030	1855720	824735	1900272	820445	1115031	1102670		1879298	91878249
	98	1112353	1855720	824735	1900272	820445	538-Z	1102667	72-U	1879002	91878249
1941-45	93-94-95-96	1112353	1855720	824735	1900272	820445	1115025	1102667	72-U	1879002	91878249
	97	1110100	1855720	824735	1900272	820445	1115031	1102670		1879298	91878249
	98	1112353	1855720	824735	1900272	820445	538-Z	1102667	72-U	1879002	91878249
1945	ACR520	1110031	1855720	824735	1900272	820445	1115149	1102670		1879298	91878249
	CC450	1110100	1855720	824735	1900272	820445	1115143	1102670		1879298	91878249
1946	91-93-94-95-96	1112353	1882391	824735	1882239	820445	1115025	1102667	72-U	1879002	91878249
	97 6 Volt Std.	1110100	1855720	824735	1900272	820445	1115031	1102670		1879298	91878249
	97 12 Volt	1110101	1882965	1867722	1849126	820445	1115043	1106631		1868730	1906901
	91-93-94-95-96 City service	1112353	1882391	824735	1882239	820445	1115025	1106403		1880252	1856494
	97 6 Volt City service	1110100	1855720	824735	1900272	820445	1115025	1105855		1883136	91878249
	98 Std.	1112353	1882391	824735	1882239	820445	538-Z	1102667	72-U	1879002	91878249
	98 City srvice	1112353	1882391	824735	1882239	820445	538-Z	1106403		1880252	1856494
	EC450	1110100	1855720	824735	1900272	820445	1115143	1102670		1879298	91878249
1947-48	91-93-94-95-96-98 Std.	1112353	1882391	824735	1882239	820445	1115380	1102667	72-U	1879002	91878249
	97—6 Volt	1110100	1855720	824735	1900272	820445	1115380	1102670		1879298	91878249
	97—12 Volt	1111770	1882965	1867722	1900272	1909590	1115042	1106631		1868730	1906901
	97—6 Volt City service	1110100	1855720	824735	1900272	820445	1115380	1105855		1883136	91878249
	91-93-94-95-96-98 6 Volt City service	1112353	1882391	824735	1882239	820445	1115380	1102677		1879002	91878249
1947-48	ACR520	1110031	1855720	824735	1900272	820445	1115149	1102670		1879298	91878249
	FC450	1110100	1855720	824735	1900272	820445	1115328	1102670		1879298	91878249
1949	91-93-94-95-96-98	1112353	1855720	824735	1869704	820445	1115380	1102667	72-U	1879002	91878249
	91-93-94-95-96-98 6-Volt City Service	1112353	1855720	824735	1869704	820445	1115380	1102677		1881309	91878249
	97 6-Volt Std.	1110100	1855720	824735	1900272	820445	1115380	1102670		1879298	91878249
	97 6-Volt City Service	1110100	1855720	824735	1900272	820445	1115380	1105855		1883136	1906917
	97 12-Volt	1111770	1882965	1867722	1900272	1909590	1115044	1106801		1909996	1906911
	FC-450	1110100	1855720	824735	1900272	820445	1115328	1102670		1879298	91878249
	HC-520, HCR-520	1112268	1911119	1867722	1900272	1905590	1115328	1102716		1879298	91878249
MAPLE LEAF											
1938	16-17	1110008	1855720	824735	1869704	820445	538-Z	1100004	60-U	1871826	1857963
1939	16	1110008	1855720	824735	1869704	820445	538-Z	1100004	60-U	1871826	1857963
1940	16	1112353	1855720	824735	1900272	820445	1115025	1102667	72-U	1879002	91878249
	16H	1110030	1855720	824735	1900272	820445	1115031	1102670		1879298	91878249
1941-44	16	1112353	1855720	824735	1900272	820445	1115025	1102667	72-U	1879002	91878249
	17	1110100	1855720	824735	1900272	820445	1115031	1102670		1879298	91878249
1945	16 1st jobs	1112353	1855720	824735	1900272	820445	1115025	1102667	72-U	1879002	91878249
	16 after jobs	1112353	1882391	824735	1882239	820445	1115025	1102667	72-U	1879002	91878249
	17	1110100	1855720	824735	1900272	820445	1115031	1102670		1879298	91878249
1946	16	1112353	1882391	824735	1882239	820445	1115025	1102667	72-U	1879002	91878249
	17	1110100	1855720	824735	1900272	820445	1115031	1102670		1879298	91878249
	17—12 Volt	1110101	1882965	1867722	1849126	820445	1115078	1106631		1868730	91906901
	16—6 Volt City service	1112353	1882391	824735	1882239	820445	1115025	1106403		1880252	1856494
	17—6 Volt City service	1110100	1855720	824735	1900272	820445	1115031	1105855		1883136	91878249
1947-48	16	1112353	1882391	824735	1882239	820445	1115380	1102667	72-U	1879002	91878249
	17 Std.	1110100	1855720	824735	1900272	820445	1115380	1102670		1879298	91878249
	17—6 Volt City service	1110100	1855720	824735	1900272	820445	1115380	1105855		1883136	91878249



The man at the wheel knows . . .

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DELCO-REMY
ELECTRICAL EQUIPMENT

The man in the shop knows it even better. He knows that Delco-Remy parts and units for replacement are the same high quality products as those used for original equipment on leading trucks and buses. He specifies them for maintenance on all Delco-Remy-equipped vehicles. And he values the *completeness* of the Delco-Remy line that makes parts available for old models and new . . . through a nationwide distributing organization.

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A UNITED MOTORS LINE AVAILABLE EVERYWHERE THROUGH
UNITED MOTORS DISTRIBUTORS

UNITED MOTORS SERVICE DIVISION, GENERAL MOTORS PRODUCTS OF CANADA LIMITED
OSHAWA, ONTARIO

Year	MODEL	Spring Generator Brush	Relay or Regulator	Starting Motor	Armature	Brush Starting Motor	Starter Drive Clutch or Bendix	Starter Switch	Dimmer Switch	Light Switch	Stop Light Switch
GMC TRUCK											
1937	T14-T15-T16-T16H-F16H	[1]1850760	1118309	734-K	823881	811553	1874156	820052	1997008	485-Z	476-S
1938	93-94-95-96-97	[1]1850760	1118309	1107009	1867897	811553	1873789	820052	1997008	485-Z	476-S
1939	93-94-95-96-98	[1]1850760	1118309	1107009	1867897	811553	1873789	820052	1997008	1994007	476-S
1940	93-94-95-96	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1995040	476-S
	96H	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995040	476-S
	98	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1995040	476-S
1941-45	93-94-95-96	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1995040	[8]1997901
	97	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995040	[8]1997901
	98	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1995040	[8]1997901
1945	ACR520	1878184	1118303	1107906	820158	811553	1873789	820052	1997008	1994027	4766
	CC450	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995040	1997725
1946	91-93-94-95-96	1878184	1118242	1107061	1867897	811553	1873789	820052	1997008	1995040	1997901
	97 6 Volt Std.	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995040	1997901
	97 12 Volt	1838341	1118316	1108676	820158	828448	1873789	820052	1997008	1995040	1997901
	91-93-94-95-96 City service	[1]1850760	1118352	1107061	1867897	811553	1873789	820052	1997008	1995040	1997901
	97 6 Volt City service	1878184	1118230	1107418	820158	811553	1873789	820052	1997008	1995040	1997901
	98 Std.	1878184	1118242	1107061	1867897	811553	1873789	820052	1997008	1995040	1997901
	98 City service	[1]1850760	1118352	1107061	1867897	811553	1873789	820052	1997008	1995040	1997901
	EC450	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995040	4766
1947-48	91-93-94-95-96-98 Std.	1878184	1118242	1107061	1867897	811553	1873789	820052	1997008	1995031	1997901
	97—6 Volt	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995031	1997901
	97—12 Volt	1838341	1118316	1108676	820158	828448	1873789	820052	1997008	1995031	1997901
	97—6 Volt City service	1878184	1118230	1107418	820158	811553	1873789	820052	1997008	1995031	1997901
	91-93-94-95-96-98 6 Volt City service	1878184	1118349	1107061	1867897	811553	1873789	820052	1997008	1995031	1997901
1947-48	ACR520	1878184	1118303	1107906	820158	811553	1856669	820052	1997008	1994027	4766
	FC450	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995031	4766
1949	91-93-94-95-96-98	1878184	1118301	1107055	1867897	811553	1873789	820052	1997008	1995031	1997901
	91-93-94-95-96-98 6-Volt City Service	1878184	1118349	1107055	1867897	811553	1873789	820052	1997008	1995031	1997901
	97 6-Volt Std.	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995031	1997901
	97 6-Volt City Service	1878184	1118350	1107418	820158	811553	1873789	820052	1997008	1995031	1997901
	97 12-Volt	1910033	1118338	1108676	820158	828448	1862058	820052	1997008	1995031	1997901
	FC-450	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995031	1997725
	HC-520, HCR-520	1878184	1118303	1107906	820158	811553	1856669	820052	1997008	1995031	1999725
MAPLE LEAF											
1938	16-17	[1]1850760	1118309	1107009	1867897	811553	1873789	820052	1997008	485-Z	476-S
1939	16	[1]1850760	1118309	1107009	1867897	811553	1873789	820052	1997008	1994007	476-S
1940	16	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1995040	476-S
	16H	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995040	476-S
1941-44	16	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1995040	1997901
	17	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995040	1997901
1945	16 1st jobs	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1995040	1997901
	16 after jobs	1878184	1118242	1107061	1867897	811553	1873789	820052	1997008	1995040	1997901
	17	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995040	1997901
1946	16	1878184	1118242	1107061	1867897	811553	1873789	820052	1997008	1995040	1997901
	17	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995040	1997901
	17—12 Volt	1838341	1118316	1108676	820158	828448	1873789	820052	1997008	1995040	1997901
	16—6 Volt City service	[1]1850760	1118352	1107061	1867897	811553	1873789	820052	1997008	1995040	1997901
	17—6 Volt City service	1878184	1118230	1107418	820158	811553	1873789	820052	1997008	1995040	1997901
1947-48	16	1878184	1118242	1107061	1867897	811553	1873789	820052	1997008	1995031	1997901
	17 Std.	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995031	1997901
	17—6 Volt City service	1878184	1118230	1107418	820158	811553	1873789	820052	1997008	1995031	1997901

CAR APPLICATION — Delco-Remy POPULAR PARTS

Year	MODEL	Distributor	Contact Set	Distributor Cap	Condenser	Rotor	Ignition Coil	Generator	Universal Generator	Armature	Brush Set Generator
MAPLE LEAF Cont.											
	17-12 Volt	1111770	1882965	1867722	1900272	1909590	1115042	1106631		1868730	[9]1906901
	16—6 Volt City service	1112353	1882391	824735	1882239	820445	1115380	1102677		1879002	[9]1878249
1949	16 Std.	1112353	1855720	824735	1869704	820445	1115380	1102667	72-U	1879002	[9]1878249
	16-6-Volt City Service	1112353	1855720	824735	1869704	820445	1115380	1102677		1881309	[9]1878249
	17 Std.	1110100	1855720	824735	1900272	820445	1115380	1102670		1879298	[9]1878249
	17 6-Volt City Service	1110100	1855720	824735	1900272	820445	1115380	1105855		1883136	1906917
	17 12-Volt	1111770	1882965	1867722	1900272	1909590	1115044	1106801		1909996	1906911
NASH											
1941	600 Series	[1]1110512	1855520	1838100	1869705	816774	[10]538-Z	1102684		1882588	[9]1878249
1942	600 Series	1110512	1855520	1838100	1869705	816774	[10]538-Z	1102684		1882588	[9]1878249
1948	600 Series	1112351	1855720	824735	1869704	820445	1115328	1102702		1911454	[9]1878249
	4860 Series	1110216	[11]813238	824735	1869704	820445	1115380	1102702		1911454	[9]1878249
1949	4940	1112351	1855720	824735	1869704	820445	1115328	1102702		1879002	[9]1878249
	4960	1110216	[11]813238	824735	1869704	820445	1115380	1102702		1879002	[9]1878249
OLDSMOBILE											
1936	6 cyl.	647-C	1882391	824735	1569706	820445	538-Z	936-T	60-U	1871826	1857963
	8 cyl.	663-K	1871869	1837974	1869705	1836893	538-Z	936-T	60-U	1871826	1857963
1937	6 cyl.	647-F	1871678	824735	1869704	820445	[12]1115126	936-T	60-U	1871826	1857963
	8 cyl.	663-W	1871870	1837974	1869704	1836893	[12]1115126	936-T	60-U	1871826	1857963
1938	6 cyl.	647-F	1871678	824735	1869704	820445	[13]538-Z	1100002	60-U	1871826	1857963
	8 cyl.	1110808	1871870	1837974	1869704	1836893	[13]538-Z	1100002	60-U	1871826	1857963
1939	6 cyl. (35 preceded by F)	647-F	1871678	824735	1869704	820445	[13]538-Z	1100002	60-U	1871826	1857963
	6 cyl. (35 preceded by N) —36	647-F	1871678	824735	1869704	820445	[13]538-Z	1100009		1871826	1857963
	8 cyl.	1110803	1871870	1838131	1869704	1836893	[13]538-Z	1100009		1871826	1857963
1940	6 cyl.	647-F	1871678	824735	1869704	820445	[13]538-Z	[14]1102664	72-U	1879002	[9]1878249
	8 cyl.	1110808	1871870	1837974	1869704	1836893	[13]538-Z	[14]1102664	72-U	1879002	[9]1878249
1941	6 cyl.	647-F	1871678	824735	1869704	820445	[13]538-Z	[14]1102664	72-U	1879002	[9]1878249
	8 cyl.	1110808	1871870	1837974	1869704	1836893	[13]538-Z	[14]1102664	72-U	1879002	[9]1878249
1942	6 cyl.	647-F	1871678	824735	1869704	820445	[13]538-Z	[14]1102664	72-U	1879002	[9]1878249
	8 cyl.	1110808	1871870	1837974	1869704	1836893	[13]538-Z	[14]1102664	72-U	1879002	[9]1878249
1946-47	6 cyl.	1110214	1871678	824735	1869704	820445	[13]538-Z	[14]1102664	72-U	1879002	[9]1878249
	8 cyl.	1110808	1871870	1837974	1869704	1836893	[13]538-Z	[14]1102664	72-U	1879002	[9]1878249
1948	6 cyl.	1110214	1871678	824735	1869704	820445	1115380	[14]1102664	72-U	1879002	[9]1878249
	8 cyl.	1110808	1871870	1837974	1869704	1836893	1115380	[14]1102664	72-U	1879002	[9]1878249
1949	35 exc hydramatic	1110214	1871678	824735	1869704	820445	1115380	1102706		1880550	[9]1878249
	35 hydramatic	1110214	1871678	824735	1869704	820445	1115380	1102707		1880550	[9]1878249
	37-38	1110814	1871870	1837974	1869704	1836893	1115380	1102704		1880550	[9]1878249
PACKARD											
1936	8 cyl., super 8		[20]813238	1857894	1869706	1836893	1854015				
1937	6 cyl.	1110203	1871678	824735	1869704	820445	539-N	948-U		1871826	1857963
1937	1500-1-2 super 8	663-L	1881853	1857894	1869704	1836893	1854015	961-J		1857866	[9]1866148
1938	6 cyl.	1110203	1871678	824735	1869704	820445	[10]539-N	1100005	60-U	1871826	1857963
1941	6 cyl.	1110132	1855720	824735	1869704	820445	[10]538-Z	1102682	72-U	1879002	[9]1878249
1942-46-47	6 cyl.	1110132	1855720	824735	1869704	820445	[10]538-Z	1102682	72-U	1879002	[9]1878249
1947	8, super 8	1110811	1871870	1837974	1869704	1836893	1115380	1102699		1879002	[9]1878249
1948	8, super 8	1110811	1871870	1837974	1869704	1836893	1115380	1102705		1879002	[9]1878249
1949	2200	1110811	1871870	1837974	1869704	1836893	1115380	1102705		1879002	[9]1878249
	2300	1110811	1871870	1837974	1869704	1836893	1115380	1102715		1880550	[9]1878249

DO NOT HESITATE TO ASK FOR ANY INFORMATION YOU NEED.

Year	MODEL	Spring Generator Brush	Relay or Regulator	Starting Motor	Armature	Brush Starting Motor	Starter Drive Clutch or Bendix	Starter Switch	Dimmer Switch	Light Switch	Stop Light Switch
MAPLE LEAF Cont.											
	17 12 Volt	1838341	1118316	1108676	820158	828448	1873789	820052	1997008	1995031	1997901
	16—6 Volt City service	1878184	1118349	1107061	1867897	811553	1873789	820052	1997008	1995031	1997901
1949	16 Std.	1878184	1118301	1107055	1867897	811553	1873789	820052	1997008	1995031	1997901
	16- 6-Volt City Service	1878184	1118349	1107055	1867897	811553	1873789	820052	1997008	1995031	1997901
	17 Std.	1878184	1118303	1107418	820158	811553	1873789	820052	1997008	1995031	1997901
	17 6-Volt City Service	1878184	1118350	1107418	820158	811553	1873789	820052	1997008	1995031	1997901
	17 12-Volt	1910033	1118338	1108676	820158	828448	1862058	820052	1997008	1995031	1997901
NASH											
1941	600 Series	1878184	1118302	1109451	1882547	1881838	1882549				
1942	600 Series	1878184	1118302	1109451	1882547	1881838	1882549				
1948	600 Series	1878184	1118302	1109451	1882547	1881838	1882549	1996478			
	4860 Series	1878184	1118302	1107949	1911763	811553	1855548	1996478			
1949	4940	1878184	1118302	1109451	1882547	1881838	1882549	1996478			
	4960	1878184	1118302	1107950	1911832	811553	1882549	1996478			
OLDSMOBILE											
1936	6 cyl.	[1]1850760	1118309	738-S	823881	811553	1874156	820052	1997008	479-K	476-S
	8 cyl.	[1]1850760	1118309	738-S	823881	811553	1874156	820052	1997008	479-K	476-S
1937	6 cyl.	[1]1850760	1118309	739-G	823881	811553	1874156	820052	1997008	480-P	476-S
	8 cyl.	[1]1850760	1118309	729-J	823881	811553	1874156	820052	1997008	480-P	476-S
1938	6 cyl.	[1]1850760	1118309	739-G	823881	811553	1874156	820052	1997008	1994503	476-S
	8 cyl.	[1]1850760	1118309	729-J	823881	811553	1874156	820052	1997008	1994503	476-S
1939	6 cyl. (35 preceded by F)	[1]1850760	1118309	739-G	823881	811553	1874156	820052	1997008	1994006	476-S
	6 cyl. (35 preceded by N) —36	[1]1850760	1118309	1107007	1867897	811553	1873789	820052	1997008	1994006	476-S
	8 cyl.	[1]1850760	1118309	1107007	1867897	811553	1873789	820052	1997008	1994006	476-S
1940	6 cyl.	1878184	1118242	1107007	1867897	811553	1873789	820052	1997008	1995014	4766
	8 cyl.	1878184	1118242	1107907	1867897	811553	1873789	820052	1997008	1995014	4766
1941	6 cyl.	1878184	1118242	1107034	1867897	811553	1873789	820052	1997008	1995038	4766
	8 cyl.	1878184	1118242	1107922	1867897	811553	1873789	820052	1997008	1995038	4766
1942	6 cyl.	1878184	1118242	1107034	1867897	811553	1873789	820052	1997008	1995038	4766
	8 cyl.	1878184	1118242	1107930	1867897	811553	1873789	1118019	1997008	1995025	4766
1946-47	6 cyl.	1878184	1118242	1107034	1867897	811553	1873789	820052	1997008	[16]1995033	4766
	8 cyl.	1878184	1118242	1107922	1867897	811553	1873789	[15]820052	1997008	[17]1995038	4766
1948	6 cyl.	1878184	1118242	1107066	1867897	811553	1873789	820052	1997008	[18]1995036	4766
	8 cyl.	1878184	1118242	1107941	1867897	811553	1873789	[15]820052	1997008	[19]1995036	4766
1949	35 exc. hydramatic	1878184	1118300	1107955	1867897	811553	1873789	1118136	1997008	1995030	1997725
	35 hydramatic	1878184	1118300	1107955	1867897	811553	1873789	1118136	1997008	1995030	1997725
	37-38	1878184	1118300	1107956	1867897	811553	1873789	1118136	1997008	1995030	1997725
PACKARD											
1936	8 cyl., super 8										
1937	6 cyl.	[1]1850760	1118204	739-F	1866105	811553	[22]1859020	1570	1997008	480-L	
1937	1500-1-2 super 8	[1]1850760	[3]1118230	729-H	1866105	811553	[23]1859546	1452	1997008	480-M	
1938	6 cyl.	[1]1850760	1118204	739-F	1866105	811553	[22]1859020	1570	1997008	1994504	
1941	6 cyl.	1878184	1118302	1107037	1878077	811553	[24]1878079	1452	1997008	[26]1995021	
1942-46-47	6 cyl.	1878184	[21]1118302	1107037	1878077	811553	[24]1878079	[25]1452	1997008	1995021	
1947	8, super 8	1878184	1118278	1107943	1910938	811553	[24]1878079	1452	1997008		
1948	8, super 8	1878184	1118278	1107943	1910938	811533	[24]1878079	1452	1997008		
1949	2200	1878184	1118331	1107943	1910938	811553	[24]1878079	1452	1997008		
	2300	1878184	1118360	1107943	1910938	811553	[24]1878079	1452	1997008		

CAR APPLICATION — Delco-Remy POPULAR PARTS

Year	MODEL	Distributor	Contact Set	Distributor Cap	Condenser	Rotor	Ignition Coil	Generator	Universal Generator	Armature	Brush Set Generator
PONTIAC											
1936	26-27	647-B	1882391	824735	1869706	820445	[13]538-Z	935-W	60-U	1871826	1857963
1936	28	663-H	1871869	1837974	1869705	1836893	[13]538-Z	935-W	60-U	1871826	1857963
1937	26	1110023	1855720	824735	1869704	820445	[13]538-Z	960-G	60-U	1871826	1857963
	28 (23-27 amps)	663-X	1871870	1837974	1869704	1836893	1115126	948-S	60-U	1871826	1857963
	28 (28-30 amps)	663-X	1871870	1837974	1869704	1836893	1115126	1100003	60-U	1871826	1857963
1938	26	1110023	1855720	824735	1869704	820445	[13]538-Z	1100004	60-U	1871826	1856963
	28	663-X	1871870	1837974	1869704	1836893	1115126	1100003	60-U	1871826	1857963
	25	1110008	1855720	824735	1869704	820445	[13]538-Z	1100004	60-U	1871826	1857963
1939	25 U.S.—26	1912884	1871678	824735	1869704	820445	[13]538-Z	1100003	60-U	1871826	1857963
	22—(25 Can.)	1110008	1855720	824735	1869704	820445	[13]538-Z	1100004	60-U	1871826	1857963
	28	663-X	1871870	1837974	1869704	1836893	1115126	1100003	60-U	1871826	1857963
1940	22-22S	1112353	1855720	824735	1900272	820445	1115025	1102667	72-U	1879002	[9]1878249
	25-26	1912884	1871678	824735	1869704	820445	[13]538-Z	1102665	72-U	1879002	[9]1878249
	28-29	1110804	1871870	1837974	1869704	1836893	1115126	1102665	72-U	1879002	[9]1878249
1941	20-22	1912884	1871678	824735	1869704	820445	[13]538-Z	1102665	72-U	1879002	[9]1878249
	25	1912884	1871678	824735	1869704	820445	[13]538-Z	1102665	72-U	1879002	[9]1878249
1942	20-22	1912884	1871678	824735	1869704	820445	[13]538-Z	1102665	72-U	1879002	[9]1878249
	25	1912884	1871678	824735	1869704	820445	[13]538-Z	1102665	72-U	1879002	[9]1878249
1946	20-22	1912884	1871678	824735	1869704	820445	[13]538-Z	1102665	72-U	1879002	[9]1878249
	25-26	1912884	1871678	824735	1869704	820445	[13]538-Z	1102665	72-U	1879002	[9]1878249
	27-28	1110804	1871870	1837974	1869704	1836893	[13]538-Z	1102665	72-U	1879002	[9]1878249
1947	20-22	1912884	1871678	824735	1869704	820445	[13]538-Z	1102665	72-U	1879002	[9]1878249
	25-26	1912884	1871678	824735	1869704	820445	[13]538-Z	1102665	72-U	1879002	[9]1878249
	27-28	1110804	1871870	1837974	1869704	1836893	[13]538-Z	1102665	72-U	1879002	[9]1878249
1948	20-22	1912884	1871678	1911597	1869704	820445	1115380	1102701	72-U	1879002	[9]1878249
	25-26	1912884	1871678	1911597	1869704	820445	1115380	1102701	72-U	1879002	[9]1878249
	27-28	1110804	1871870	1837974	1869704	1836893	1115380	1102701	72-U	1879002	[9]1878249
1949	20-22-25	1110219	1871678	1911597	1869704	820445	1115378	1102701	72-U	1879002	[9]1878249
	27	1110816	1871870	1911566	1869704	1836893	1115378	1102701	72-U	1879002	[9]1878249
STUDEBAKER											
1936	president (2-C)	662-M	[28]1842058	185439[0]	1908846	1836893	540-R	936-H		1856072	1857963
1937	president 8	662-M	[28]1842058	1854390	1908846	1836893	540-R	961-X		1866171	[9]1866148
1938	president 8	662-M	[28]1842058	1854390	1908846	1836893	1115021	1102653		1857866	[9]1866148
1939	president 8	662-M	[28]1842058	1854390	1908846	1836893	1115021	1102656		1879002	[9]1866148
1940	president 8	662-M	[28]1842058	1854390	1908846	1836893	1115021	1102671		1879002	[9]1878249

CONSUMER PRICE LIST - - - Delco-Remy POPULAR PARTS

DISTRIBUTORS

645-T	14.75
647-B	23.25
647-C	23.25
662-M	31.00
663-F	25.60
663-E	25.60
663-H	25.60
663-K	25.60
663-L	27.15
663-W	25.60
663-X	25.60
663-Z	25.60
1110008	14.75
1110030	16.30
1110031	22.30
1110100	16.30
1110101	23.25
1110132	23.25
1110203	23.25
1110214	23.25
1110216	23.25
1110219	21.00
1110512	16.30
1110801	25.60
1110803	27.15
1110804	25.60
1110805	25.60
1110808	25.60
1110811	25.60
1110814	26.35
1110815	23.25
1110816	23.25
1111770	34.90
1112268	46.50

DISTRIBUTORS CONT.

1112351	16.30
1112353	58.25
1868671	25.60
1912884	22.50
1912414	23.25

CONTACT SETS

813238	.75
1842058	1.00
1855520	1.25
1855720	1.25
1871678	1.30
1871869	1.50
1871870	1.55
1881853	1.55
1882391	1.25
1882965	1.70
1911119	1.25

DISTRIBUTOR CAPS

824735	1.75
1837974	3.50
1838100	2.05
1838131	3.90
1854390	3.90
1857894	3.90
1867722	3.50
1911566	5.45
1911597	4.65

CONDENSERS

1849126	4.65
1869704	.85
1869705	.85

CONDENSERS CONT.

1869706	.85
1882239	.90
1900272	1.15
1908846	1.15

ROTORS

816774	.45
820445	.40
1836893	.60
1909590	.90

IGNITION COILS

538-Z	6.90
539-N	7.75
540-R	7.75
1115021	7.35
1115025	6.25
1115026	7.35
1115031	6.25
1115042	7.90
1115043	7.90
1115044	7.90
1115078	7.90
1115126	7.25
1115143	6.50
1115149	6.50
1115326	6.50
1115378	6.90
1115380	6.90
1854015	9.30

GENERATORS

918-A	49.40
918-B	49.40
935-W	36.45

GENERATORS CONT.

936-H	36.45
936-T	39.35
936-U	36.45
936-V	36.45
936-W	36.45
937-S	36.45
948-U	36.45
960-G	36.45
961-J	33.75
1100002	36.45
1100003	36.45
1100004	36.45
1100005	36.45
1100009	36.45
1101052	36.45
1101053	36.45
1101055	36.45
1102662	36.45
1102664	33.75
1102665	33.75
1102666	62.00
1102667	33.75
1102668	36.45
1102670	43.50
1102671	33.75
1102679	36.45
1102682	33.75
1102684	51.25
1102692	46.50
1102694	51.25
1102699	51.25
1102700	39.55

GENERATORS CONT.

1102701	36.85
1102702	51.25
1102704	51.25
1102705	51.25
1102706	39.55
1102707	39.55
1102708	39.55
1102709	39.55
1102715	42.45
1102716	46.50
1105855	62.00
1106403	155.00
1106631	170.50
1106801	170.50

ARMATURES GENERATOR

1856072	15.50
1857866	17.10
1866171	17.10
1866410	15.50
1868730	57.35
1871826	10.35
1877806	17.10
1879002	11.60
1879298	11.90
1880252	54.25
1880550	11.60
1881309	17.10
1882588	17.10
1909996	57.25
1911454	17.10
1912599	17.10

UNIVERSAL GENERATORS

52-U	36.45
60-U	36.45
62-U	36.45
72-U	33.75

BRUSH SET GENERATOR

1856494	.70
1857963	.95
1866148	.32
1878249	.32
1906901	1.55

We carry a complete stock of all Delco-Remy parts. If your particular model is not listed. PLEASE CONTACT.

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Delco-Remy POPULAR PARTS — CAR APPLICATION

Year	MODEL	Spring Generator Brush	Relay or Regulator	Starting Motor	Armature	Brush Starting Motor	Starter Drive Clutch or Bendix	Starter Switch	Dimmer Switch	Light Switch	Stop Light Switch
PONTIAC											
1936	26-27	[1]1850760	1118315	727-Y	823881	811553	1873789	820052	1997008	479-S	476-S
1936	28	[1]1850760	1118315	727-S	823881	811553	1873789	1546	1997008	479-S	476-S
1937	26	[1]1850760	1118315	739-C	1847432	811553	1859020	1570	1997008	1995040	476-S
	28 (23-27 amps)	[1]1850760	1118315	727-S	823881	811553	1873789	1546	1997008	480-V	476-S
	28 (28-30 amps)	[1]1850760	1118315	727-S	823881	811553	1873789	1546	1997008	480-V	476-S
1938	26	[1]1850760	1118309	1107009	1867897	811553	1873789	820052	1997008	1995004	476-S
	28	[1]1850760	1118315	727-S	823881	811553	1873789	1546	1997008	1995004	476-S
	25	[1]1850760	1118309	1107009	1867897	811553	1873789	820052	1997008	1995004	476-S
1939	25 U.S.—26	[1]1850760	1118309	1107008	1867897	811553	1873789	820052	1997008	1995007	476-S
	22—(25 Can.)	[1]1850760	1118309	1107009	1867897	811553	1873789	820052	1997008	[27]1995007	476-S
	28	[1]1850760	1118309	1107914	1867897	811553	1873789	820052	1997008	1995007	476-S
1940	22-22S	1878184	1118242	1107009	1867897	811553	1873789	820052	1997008	1995014	
	25-26	1878184	1118242	1107022	1867897	811553	1873789	820052	1997008	1995014	1997725
	28-29	1878184	1118242	1107914	1867897	811553	1873789	820052	1997008	1995014	1997725
1941	20-22	1878184	1118242	1107039	1867897	811553	1873789	820052	1997008	1995018	1997725
	25	1878184	1118242	1107032	1867897	811553	1873789	820052	1997008	1995018	1997725
1942	20-22	1878184	1118242	1107039	1867897	811553	1873789	820052	1997008	1995035	
	25	1878184	1118242	1107032	1867897	811553	1873789	820052	1997008	1995035	1997725
1946	20-22	1878184	1118242	1107039	1867897	811553	1873789	820052	1997008	1995035	
	25-26	1878184	1118242	1107032	1867897	811553	1873789	820052	1997008	1995035	1997725
	27-28	1878184	1118242	1107921	1867897	811553	1873789	820052	1997008	1995035	1997725
1947	20-22	1878184	1118242	1107039	1867897	811553	1873789	820052	1997008	1995035	
	25-26	1878184	1118242	1107032	1867897	811553	1873789	820052	1997008	1995035	4766
	27-28	1878184	1118242	1107921	1867897	811553	1873789	820052	1997008	1995035	4766
1948	20-22	1878184	1118242	1107039	1867897	811553	1873789	820052	1997008	1995035	
	25-26	1878184	1118242	1107070	1867897	811553	1873789	820052	1997008	1995035	4766
	27-28	1878184	1118242	1107947	1867897	811553	1873789	820052	1997008	1995035	4766
1949	20-22-25	1878184	1118301	1107080	1867897	811553	1873789	1118140	1997008	1995031	1997725
	27	1878184	1118301	1107957	1867897	811553	1873789	1118140	1997008	1995032	1997725
STUDEBAKER											
1936	president (2-C)	[1]1850760	5546	737-J	1863128	811553	[23]1859546	1528			
1937	president 8	[1]1850760	[3]1118230	729-G	820158	811553	1873789	1546			
1938	president 8	[1]1850760	[3]1118230	1107903	820158	811553	1873789	1546			
1939	president 8	[1]1850760	[3]1118230	1107903	820158	811553	1873789	1546			
1940	president 8	1878184	1118302	1107903	820158	811553	1873789	1546	1997008		

CONSUMER PRICE LIST - - - Delco-Remy POPULAR PARTS

SPRING GENERATOR BRUSH

1838341	.16
1850760	.08
1878184	.08
1910033	.23

REGULATORS

5546	10.15
1118204	10.15
1118230	13.10
1118242	11.60
1118278	11.60
1118300	11.50
1118301	11.60
1118302	11.60
1118303	11.50
1118309	10.15
1118315	10.15
1118316	13.10
1118331	11.60
1118338	16.70
1118349	13.10
1118350	13.10
1118352	13.10
1118357	12.35
1118360	12.35

STARTING MOTOR

727-S	58.25
727-W	58.25
729-J	42.65
734-K	38.75
734-Z	54.25

STARTING MOTOR CONT.

738-G	41.10
738-S	38.75
739-A	41.10
739-C	44.20
739-G	38.75
1107005	54.25
1107007	38.75
1107008	38.75
1107009	38.75
1107022	38.75
1107032	38.75
1107034	38.75
1107037	44.20
1107039	36.80
1107049	54.25
1107055	38.75
1107061	38.75
1107066	38.75
1107070	38.75
1107075	54.25
1107078	54.25
1107080	39.60
1107418	42.65
1107422	51.25
1107903	58.25
1107906	42.65
1107907	42.65
1107908	58.25
1107914	42.65
1107921	42.65
1107922	42.65

STARTING MOTOR CONT.

1107929	58.25
1107930	58.25
1107941	42.65
1107943	51.25
1107947	42.65
1107949	42.65
1107950	42.65
1107953	58.25
1107955	58.25
1107956	58.25
1107957	58.25

ARMATURES

820158	10.35
823881	10.35
1847432	8.95
1863128	13.20
1866105	13.20
1878077	8.95
1882547	13.20
1883136	17.10
1910938	13.20
1911763	13.20
1911832	13.20

BRUSH STARTING MOTOR

811553	.23
828448	.32
1881838	.32

DRIVES CRANKING MOTOR

1856669	6.90
1859020	8.65
1862058	6.90
1873789	6.90
1874156	6.90

STARTER SWITCH

1452	5.80
1528	6.55
1542	13.50
1546	13.50
1570	6.55
362941	1.45
820052	1.35
1118019	10.80
1118135	8.80
1118136	8.80
1118140	7.80
1996478	1.90

STOP LIGHT SWITCH

474-Y	1.20
476-S	.60
4760	.85
4766	.85
1997725	.60
1997901	1.20

DIMMER SWITCH

1997008	1.20

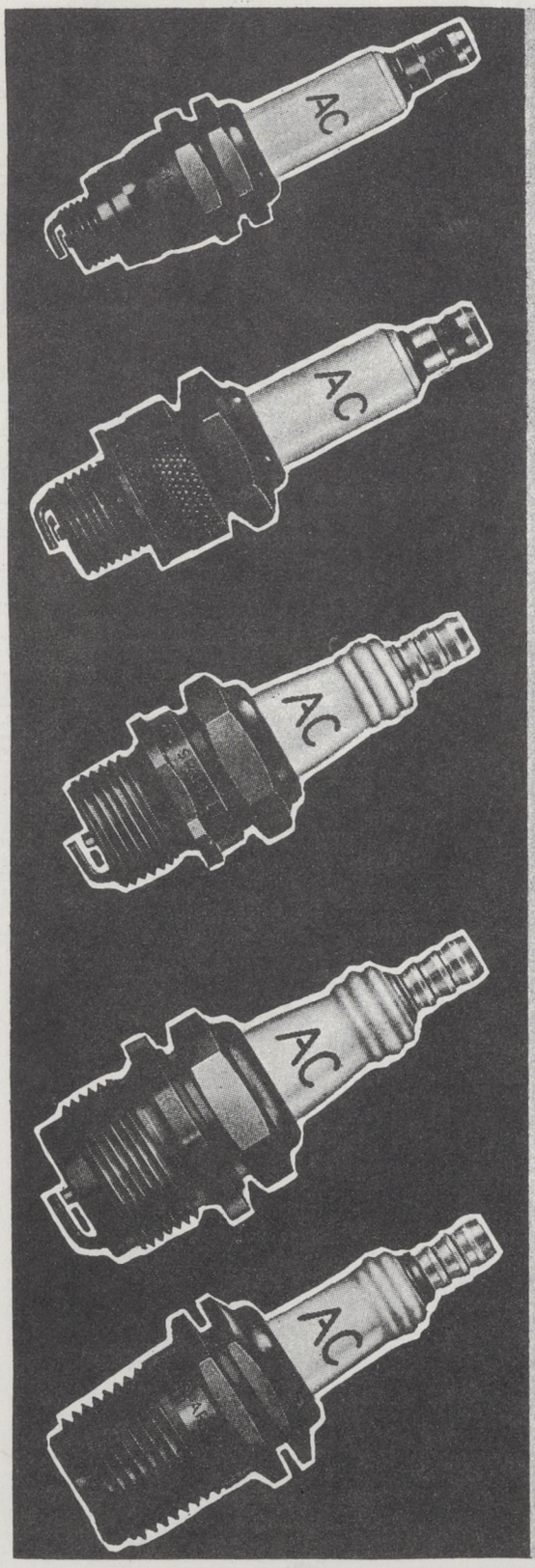
LIGHT SWITCH

479-K	4.20
479-M	3.30
479-N	4.20
479-S	3.30
480-L	4.20
480-M	4.20
480-P	4.20
480-V	3.30
480-W	4.20
485-Z	1.80
1994006	2.00
1994007	2.20
1994027	1.70
1994501	4.20
1994503	4.20
1994504	4.20
1994508	4.20
1995004	3.30
1995007	3.30
1995014	3.00
1995016	3.00
1995018	3.00
1995021	3.00
1995025	3.30
1995030	3.30
1995031	3.30
1995032	3.30
1995033	3.30
1995035	3.30
1995036	3.30
1995038	3.30

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AC The Quality Spark Plug

PASSENGER CAR TYPES



Hex	Reach	Thread Size	Type Number
11/16"	1/4"	10 MM	M-8
11/16"	1/4"		106
5/8"	1/4"		104
11/16"	1/4"		103-S
9/16"	1/4"		103
13/16"	3/8"	14 MM	48
13/16"	3/8"		47
13/16"	3/8"		46-5
13/16"	3/8"		46
13/16"	3/8"		45
13/16"	7/16"		45-L
13/16"	3/8"		44
7/8"	9/16"	18 MM	88
7/8"	1/2"		86
7/8"	1/2"		84
15/16"	9/16"	7/8"	78
1 1/8"	19/32"		78-S
15/16"	5/8"		76
7/8"	27/32"		76-S
15/16"	1/2"		74
15/16"	1/2"		75
15/16"	5/8"		75-S
15/16"	1/2"		73
15/16"	1/2"		73-S
15/16"	—	1/2"	26
15/16"	—		24

EVERY ORDER IS A RUSH ORDER WITH US.

Spark Plug Specification Chart

CONSUMER PRICE LIST ---A/C SPARK PLUGS.

Type	Price	Type	Price	Type	Price	Type	Price	Type	Price
M-8	.85	45	.85	47 Com	.85	78-S	.85	86 Com	.85
24	.85	45 Com	.85	48	.85	82 Com	.85	87 Com	.85
26	.85	45-L	.85	73	.85	82S Com	.85	88	.85
43 Com	.85	45L Com	.85	74	.85	83 Com	.85	88L Com	.85
43L "	.85	46	.85	75	.85	84	.85	103-S	.85
44	.85	46-5	.85	76	.85	85 Com	.85	103 Com	.85
44 Com	.85	46 Com	.85	76-S	.85	85S Com	.85	104	.85
44-5 Com	.85	47	.85	78	.85	86	.85	106	.85

Passenger Cars

***BUICK**
1927-29 Ser. 20, 40, 50 . . . 76S
1929-30 Ser. 44, 45, 46 . . . 88
1931-37 Ser. 44, 45, 46, 48, 49 . . . 86†
1938-42 Ser. 44, 45, 46, 47, 48, 49 . . . 46
Except Mdls. with 10/mm Hds. . . . 106
1946-49 All Models . . . 48
1950 Spec. (44) . . . 48

***CHEVROLET**
1924-27 All Mdls. . . . 78
1928 All Mdls. . . . 78S
1929-32 All Mdls. . . . 86
1933-37 All Mdls. . . . 46
1938-42 All Mdls. (Can.) . 44
1941-45 All Mdls. (USA) . 106
1946-48 All Models . . . M-8
1949-50 All Models . . . 46-5

CHRYSLER
1927-30 Red Head Mdls. E, G, H, I, J, L, M, P, R . . 76
1930-32 Silver Dome Mdls. C, (CD-1st Ser. to 15671) CG, CJ, CM, V, W . . . 88
1930-32 Red Head Mdls. C, (CD-1st Ser. to 15671) CG, CJ, CM, V, W . . . 86
1931-32 Silver Dome Mdls. CD, (2nd. Ser. after 15671), (CG Part) CH, CI, CL, CP . . . 47
1932 Red Head Mdls. CD, (CG Part) CH, CI, CL, CP, and
1933 Silver Dome Mdls. CL, CO, CT, CQ, and
1934 Mdls. CA, CB, CU, CV, CW, CX, CY, and
1935-36 Mdls. C, CW, CZ, C1, C2, C3, C7, C8, C9 . . 46
1934-42 All Mdls. with Alum. H.C. Hd. . . . 45L
1936-42 Mdls. C10, C11, C14, C15, C16, C17, C18, C19, C20, C22, C23, C24, C25, C26, C27, C28, C30, C33, C34, C36, C37 . . . 45
1946-49 All Models . . . 44

DE SOTO
1928-32 Mod. CF, CK, K, SA . . . 86
1932-33 Mod. SC, SD Silver Dome . . . 47
1932-36 Mod. SC, SD (Red Hd.) SE, SF, S-1, S-2 . . 46
1934-42 All Mdls. with H.C. Alum. Hd. . . . 45L
1937-42 Mod. S-3, S-5, S-6, S-7, S-8, S-10 . . . 45
1946-49 All Models . . . 44

DODGE
1924-30 4 Cyl. Mdls. A, 6 Cyl. Mdls. J, H, M, O . . 78S
1929-31 Mdls. H, DC, DD, DG, DH, DI . . . 86
1932-36 Mdls. DC, DD, DG, DH, DK, DL, DM, DO, DP, DR, DS, DU, D-2 . . 46
1937-42 Mdls. D-5, D-8, D-11, D-14, D-17, D-19, D-22 . . . 45
1932-42 All Mdls. with H.C. Alum. Hds. . . . 45L
1946-49 All Models . . . 44

FORD
1908-27 Mdl. T . . . 26 or 24
1928-34 Mdls. A & B . . . 78S
1932 Mdl. V8-65 (Ser. 18) and
1933-37 All Mdls. with ⅞ Hds. . . . 76
1933-37 V8-80, 85 (Ser. 40, 48, 68, 78) (Except ⅞ Hds.) 84
1937-49 6 & 8 Cyl. All Models . . . 45L

HUDSON
1924-28 All Mdls. . . . 88
1929-32 S11 Mdls. and
1933 All 8 Cyl. Mdls. . . . 86
1933 Super Six . . . 46
1934-42, 46-49 All Mdls. Except H.C. Alum. Hd. . 44
1934-42, 46-49 All H.C. Alum. Hd. . . . 45L

MERCURY
1939-49 All Models . . . 45L

***NASH (Lafayette)**
1925-28 Mdls. Ser. 220 78S

NASH (Lafayette) (Cont'd)
1925-28 Mdls. Ser. 230, 260, 330, 360 . . . 76S
1929-32 Mdls. Ser. 420, 450, 680, 870, (960 & 970 after 8-1-31) . . . 88
1929-37 Mdls. Ser. 430, 460, 480, 490, 890, 990, 1060, 1070, 1090, 1120, 1130, 1170, 1190, 1290, (Std. & Spec. 6-110) (Std. & Spec. 3510), 3540, 3610, 3640, 3640A, 3710 86
1931-36 Mdls. Ser. 880, (960 & 970 before 8-1-31) 980, 1080, 1180, 1220, 1280, 3520, 3580, 3620, 3680 . . . 47
1935-40 Mdls. (3520 & 3580 overdrive) 3620, 3680, 3720, 3780, 3820, 3880, 3920, 4020, 4080, and
1941-42 Mdls. 4140, 4160, 4180, 4240, 4260, 4280 . . 45
1946-50 All Models . . . 44

***OLDSMOBILE**
1924-27 . . . 76S
1928 . . . 88
1929-36 . . . 86
1937-40 All . . . 45
1941-47 All . . . 44
1946-50 All . . . 45 or 48

***PACKARD**
1924-31 All Mdls. except 1930 H.C. Turbo . . . 78
1930 Mdls. with Hi. C. Turbo Head . . . 86
1932 All Mdls. 900-1-2-3-4-5-6 Ser. . . . 46
1933-36 Ser. 1000, 1100, 1200, 1400 . . . 45
1937-49 All Models . . . 104

PLYMOUTH
1928-29 Mdl. Q (Silverdome) . . . 78
1928-29 Mdl. Q (Redhead) 76
1930-32 Mdl. U, PA . . . 86
1932-36 Mdl. PB, PC, PD, PE, PF, PG, PJ, P-1, P-2 with Silverdome . . . 46

PLYMOUTH
1932-36 Mdl. PB, PC, PD, PE, PF, PG, PJ, P-1, P-2 with Red Hd. and
1937-42 Mdl. P-3, P-4, P-5, P-6, P-7, P-8, P-9, P-10, P-11, P-12, P-14, P-14-S 45
1934-42 All Mdls. with H.C. Alum. Hd. . . . 45L
1946-49 All Models . . . 44

***PONTIAC**
1926-29 All Mdls. . . . 78
1930-31 Mdls. 6-30B 401 . 88
1932 Mdls. 302, 402 (Except H.C. Hd.) . . . 47
1932 Mdls. 302, 402, H.C. Hd.; and
1933 Mdl. 601 . . . 46
1934-42, 46-48 All Mdls. Except (H.C. Hd.) . . . 45
1934-42, 46-48 All Mdls. with H.C. Hd. . . . 44
1949 All Models . . . 45
1937, 26 . . . 46
1938, 25-26 . . . 46
1939, 22-25 . . . 44
1940 All exc. (-22) . . . 45
1940, 22 . . . 44
1941-50 All . . . 45

STUDEBAKER
1924-27 Std. 6, Spec. 6, Big 6 . . . 78
1928-32 Stud. 6, Dict. 8, Com. 8, Pres. 8 . . . 76
1928-32 All Mdls. with Hi. Comp. Hd. . . . 74
1933-41 All Stud. 6, Dict. 6, Com. 8, Pres. 8, Coupe Express (Except 1941 Champ. 6) . . . 86
1933-1941 All Mdls. with Hi. Comp. Hd . . . 84
1941 Champ 6,
1942-50 All Models . . . 44

WILLYS (and Jeep)
1930-39 All Mdls. . . . 86
1940-42 Mdls. 4-40, 4-441, 4-442 . . . 44
1940-42 Hi. Comp. Hd. . . . 45L
1941-45 Jeep Models MA, MB, 1946-49 All Models 44

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Spark Plug Specification Chart

Trucks and Truck Tractors

	NORMAL SERVICE	SEVERE SERVICE
CHEVROLET (Canadian)		
1924-27 All Models	78	76
1928-29 Model AB	78S	76
1929-32 All Models	87-Com	86-Com
1933-37 All Models	46-Com	44-Com
1938-40 All Models	44-Com	43-Com
1941-44 All (Canadian)	44-Com	43-Com
1941-42 All (U.S.A.)	106	103S or 103-Com
1945 13-15 1st type	44-Com	43-Com
13-15 2nd type	106	
14-18	44-Com	43-Com
1946-48 All	106	
1949-50 11-14-15-18	44S-Com	43-Com
13	46-5	
DIAMOND T		
1930 Models 200, 215	85S-Com	83-Com
1939-41 All 7/8" Thd.	74	73
1939-49 All 14 M/M Thd.	43-Com	42-Com
Thru 1949 Models using Cont. Eng. T-6427, T-6371	86-Com	83-Com
Thru 1949 using Cont. R-6572	82-Com	82-Com
All Others	75	73
DODGE (Engine Models)		
Models 124, 130	78	75
Models CG, DD-2C, U	86-Com	85-Com
Models DA-1E, DA-2E, DD, DD-2A, DD-2E, DD-2G, DD-2T, DP, TC-1E, T-4E	85-Com	83-Com
Model CG-3	85S-Com	83S-Com
1937-42 All Eng. (Alum. Hds.)	45L-Com	43L-Com
1935-48 Models using Eng. 218, 219, 230, 231, 238, 251, 252, 281, 331; 1949 Models using Eng. T-159	44-Com	43-Com
FARGO		
1933 34 Eng. CG3	85S-Com	83-Com
1933-34 Eng. TDP, T2, T4, T5, T6, T7, T8	44-Com	43-Com
1933-34 Eng. T2C, T2E, T3E, T3G	47-Com	45-Com
All 1937-38-39-40-41 (Export); 1942 except T-124	45-Com	44-Com
1942 T-124	44-Com	43-Com
All Alum. Heads	45L-Com	43L-Com
All Others	75	73
FORD		
1924-27 Model T	26	24
1928-34 4 Cylinder Models AA, BB	78S	76
1932-35 V8-70, 80, 85 Cast Iron Hd.	75	73
1932-35 V8-70, 80, 85 Alum Hd.; 1934-37 Utility 4 Cyl. (Ser. 46); 1936-37 V8-85	85-Com	83-Com
1937-40 V8-60; 1941-42 Economy 4 Cyl. (Ser. 1NC, 2NC); 1941-45 Mod. GP (Army Jeep)	45L-Com	43L-Com
1938-49 All Others	43L-Com	43-Com
F. W. D.		
1934 thru 36 using Wauk. Eng. MK, MS, MZ, RB, SRK, SRL, SRS, XSRK, 6-125; Own A Eng.; 1937 thru 39 using Wauk. RB, SRK, SRL, SRS; 1939 thru 42 using Wauk. RBR, SRKR, SRLR; Herc. HXE (1937 thru 45)	74	73
1934 thru 36 using Wauk. 6BK, 6-90, 6-110; 1937 thru 42 using Wauk. BK, MK, MKR, 6-110, 6-125; 1940 thru 48 Wauk. BZ; MZR (1939 thru 46); MZA (1947 thru 48)	85-Com	83-Com
1946 thru 48 using Wauk. 6-SRKR	75	73
1942 thru 48 using Wauk. 140GZ, 145GK; 1946-47 Herc. HXE	83-Com	82-Com
All Others	78	75
G.M.C. (Engine Models)		
1930-31 Model 200; 1932 Models 401, 402	87-Com	85S-Com
1934-36 Models 207, 213, 450; 1933-35 Model 221 (To Eng. 221-18144); 1931-36 Model 257 (To Eng. 1257-9645); 1931-36 Model 331; 1931-37 Model 400	85S-Com	83S-Com
1932 Models 200, 401, 402	47-Com	45-Com
1935 Model 221 (After Eng. 221-18144); 1938 Model 223	45-Com	44-Com
1937-40 Model 230; 1936-38 Models 239, 286; 1937-38 Models 257 (After Eng. 1257-9645), 331, 400, 450	45-Com	44-Com
1937-40 Model 216 (Chev.); 1939-49 Models 228, 236, 248, 256, 270, 278, 308, 361, 426, 451, 477	44-Com	43-Com
1941-42 Model 235 (Chev.)	106	103-Com
G.M.C. (Canadian)		
1937-39 All	46-Com	45-Com
1940-45 All	44-Com	43-Com
1946 All Exc. (97 & EC450)	106	
97 & EC450	44-Com	43-Com
1947 All Exc. (97, ACR520, FC450)	106	
97, ACR520, FC450	44-Com	43-Com
1948 All Exc. (97 & FC450), ACR520	106	
97, FC450, ACR520	44-Com	43-Com
1949 All Exc. (93, 97, FC450, ACR520)	44-5-Com	43-Com
93	46-5	
97, FC450, HCR520	44-Com	43-Com
1950 All Exc. (93, 97, HC450)	44-5-Com	43-Com
93	46-5	
97, HC450	44-Com	43-Com
G.M.C.		
Fire Truck—All	85S-Com	83-Com
INTERNATIONAL HARVESTER		
K-6 & KS-6 after Serial Nos. 2401, K-7, & KS-7 after Serial No. 3301 1944 and up	44-Com 45-Com	
K-8, K-10, K-11, 1944 and up	43-Com 44-Com	

	NORMAL SERVICE	SEVERE SERVICE
INTERNATIONAL HARVESTER (Cont'd)		
GRD Motors 175 to Serial No. 1760 — use	85 Com.	
214 to Serial No. 65499 — use	85 Com.	
233 to Serial No. 63854 — use	85 Com.	
175A to Serial No. 65499 — use	85 Com.	
214A to Serial No. 4378 — use	85 Com.	
233A to Serial No. 2029 — use	85 Com.	
GRD Motors—After these Serial Numbers, or any motor overhauled with a new GRD cylinder head, all use 14 MM Spark Plugs	43-Com 44-Com	
All BLD Motors—equipped since 1944 on K-6 and up use 14MM. Spark Plugs	43-Com 44-Com	
C-1, C-5, C-12, C-15, C-30, C-30S, C-30T, CS-30, C-300, D-1, D-2, D-2M, D-3, D-5, D-5M, D-15, D-15M, D-12SB, D-21SB, D-29, D-30, D-30B, DS-30, DS-30B, D-31SB, D-37SB, D-300, D2-300, D-186T, S-186T; also Models K-1, K-1M, K-3M, K-2, K-3, K-4, K-5, equipped with GRD Motors to above Serial Numbers	85S-Com	
All Speed Trucks (6 Cylinders); All Speed Trucks (4 Clyinders) AL-3, A-3, A-3½, ALF-3, AW-1, AW-2, A-1, A-2, A-4, A-5, A-6, A-7, A-7F, A-8, A-8F, AR-626F, B-2, B-3, B-4, HS-54, HS-54C, HS-74, HS-74C, HS-104C, W-1, W-2, W-3, M-2, M-3, C-10, C-20, CS-20, C-35, C-35T, CS-35, CS-35T, C-35B, C-35D, CS-35B, C-36, C-40, C-40T, C-40F, CS-40, CS-40T, C-40A, CS-40A, C-41, C-50, C-50T, C-50F, CS-50, CS-50T, C-55, C-55T, C-55F, C-60, C-60T, D-21SBB, D31-SBB, D377-SBB, D-39, D-35, DS-35B, DS-35, DS35B, D-40, D-40B, DR-40, DS-40, D-43SB, D-49SB, D-49SBB, D-50,		
MACK		
Eng. Models (7/8" Hd.) AB, AC, AK, AP, BC, BK, BQ, BX	75	73
Eng. Models (18 M/M) A3, BG, BL	85-Com	83-Com
Eng. Models (18 M/M) CE, CF, CT, CU, EF, EN-11, EN-253, EN-271, EN-310, EN-354, EN-354A, EN-405, EN-431, EN-457, EN-471, EN-510, EN-510A, EN-707A, EO, EP, EP-611, EY, FK, FM, FO, MR-140, MR-209, MR-228, MR-268	83-Com	83-Com
Eng. Models (14 M/M) EN-354, (EH Army), EN-405, EN-431, EN-457, EN-471, EN-510, EN-532 (NJU Army), EJ, EO, EP, EY, EY (NM & NO Army)	43-Com	43-Com
MAPLE LEAF (Canada)		
1937-39 All	46-Com	44-Com
1940-44 All	44-Com	43-Com
1945 16 1st type	44-Com	43-Com
16 2nd type	106	
1945-48 17	44-Com	43-Com
1946-48 16	106	
1949-50 16	44-5-Com	
17	44-Com	43-Com
PLYMOUTH		
1937-38-39-40-41	44-Com	43-Com
REO		
Models 1932-36 All with 18 M/M Hd. Tap (except Models 4H-5 4J-5 4K-5 4M-5)	85-Com	83-Com
Models 4H-5 4J-5 4K-5 4M-5 using Buda Eng.	87-Com	85-Com
All Models with 7/8-18 Hd. Tap	75	73
1937 Models 450 475; 1938-39 Models	45L-Com	43L-Com
1937 All Others	45-Com	44-Com
1940-41 All; 1942 All Except Models 23H, 25, 27	44-Com	43-Com
1942 Models 23H, 25, 27	85-Com	83-Com
1946-48 All using Reo Eng.	43-Com	42-Com
1946-49 Models using Cont. Eng. T-6371, T-6427, R-6513, R-6602	86-Com	82-Com
1949 Models All using Reo Eng.	46-Com	43-Com
STUDEBAKER		
1930-31 Models S20, S30, S40, S50, S60, S100, S110; 1932 Models S10, S20, S50, S101, S150; 1930-32 All Others	75	73
1932 Models S21, S31, S41, S51, S61, S120, S130, S140; 1941 Models M5, M15, M16; 1933-40 All Others	86-Com	83-Com
1937 Models J20, J20M, J25, J25M, J30, J30M; 1938-40 Models K30, K30M	75	73
1942-49 All Models	44-Com	43-Com
***WHITE (Engine Mod.)**		
Models GRCB Herc. ZXC-3	75	73
Models 2A, 7A, 14A, 15A, 18A, 529A, 4AB	74	73
1935-36 Models 9A, 11A, 10AB, 12AB; Models 12A, 12AC, 13A, 16A, 23A, 29A with 14 M/M Head Tap; 1939 Models 32A, 33A, 270, 318, 681; 1942 Models 20A, 21A, 24A, 25A, 30A	44-Com	43-Com
1940 Model 32A; 1942 Model 35A	45-Com	44-Com
1941-49 All with 14 M/M Hd. Tap	43-Com	42-Com
Eng. Models 8A, 11-A	85S-Com	82S-Com
1941-49 Eng. Models 5A, 6A; All Models with 18 M/M Tap	83-Com	82-Com
WILLYS		
1937-38-39 Commercial	86-Com	83-Com
1942 Panel Pickup; 1940-41 Station Wagon; 1947-48 Models 2T, 4T, 4-63-PD	44-Com	43-Com

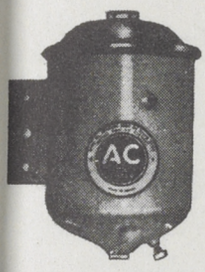
EVERY ORDER IS A RUSH ORDER WITH US.

AC FILTERS FOR PASSENGER CARS

CONSUMER PRICE LIST --- A/C OIL FILTERS and ELEMENTS

Type	Price	Type	Price	Type	Price	Type	Price	Type	Price
W21	3.30	PF122	4.65	302	1.80	1001	5.50	1007	12.65
C112	1.80	C203	1.55	316	1.70	1002	9.40	1008	11.55
113	2.15	C204	1.70	PF317	2.10	1003	9.20	F1009	12.10
115	1.80	206	2.20	318	2.15	1004	9.40	1010	13.15
117	2.50	231	1.70	F1000	3.30	1006	12.65	1026	1.55
121	3.85							1027	1.85

Complete PACKAGED FILTERS FOR THE "BIG 3"

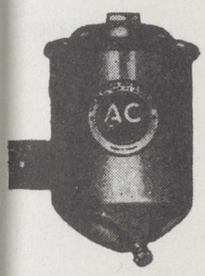


TYPE F-1002

CHEVROLET 1939-'49

Same as type F-1001 with special welded bracket complete with flexible lines and fittings.
(Alternate installation to F-1006).
Smaller in capacity and lower in price than F-1006.

Replacement Element Type F-1026

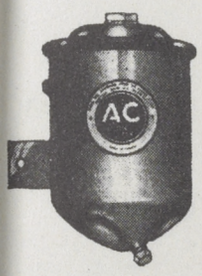


TYPE F-1001

DODGE - PLYMOUTH - DE SOTO - CHRYSLER

Recommended for replacement of conventional "throw-away" type factory equipment cartridge on Chrysler-built cars.
Package contains everything needed for complete installation using existing lines or fittings.

Replacement Element Type F-1026

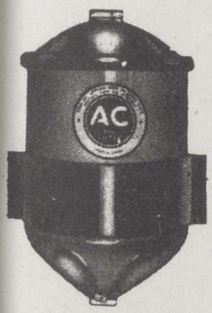


TYPE F-1003

DODGE - PLYMOUTH - DE SOTO - CHRYSLER

Same as type F-1001 described above but package contains flexible lines and fittings to make preferred installation.
(Alternate installation to F-1007).
Smaller in capacity and lower in price than F-1007..

Replacement Element Type F-1026

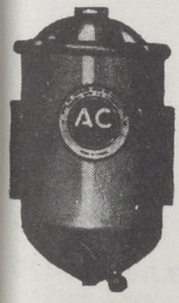


TYPE F-1007

DODGE - PLYMOUTH - DE SOTO - CHRYSLER

F-1005 Filter with band bracket, flexible lines and fittings.

Replacement Element Type C-204



TYPE F-1006

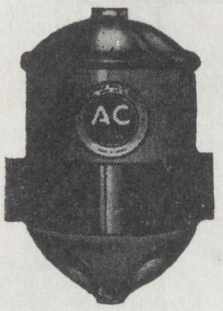
CHFVROLET 1939-'49

F-1005 Filter with special welded bracket complete with flexible lines and fittings.

Replacement Element Type C-204

AC FILTERS FOR PASSENGER CARS

Complete PACKAGED FILTERS FOR THE "BIG 3"

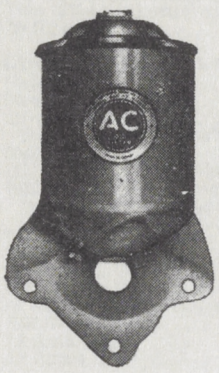


TYPE F-1010

PONTIAC 1947-'49

F-1005 Filter with bracket, flexible lines and fittings.

Replacement Element Type C-204

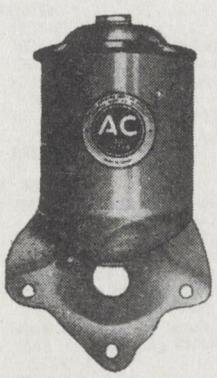


TYPE F-1009

FORD V8 - 85 - MERCURY

F-1005 Filter with welded mounting bracket, flexible lines and fittings.

Replacement Element Type C-204

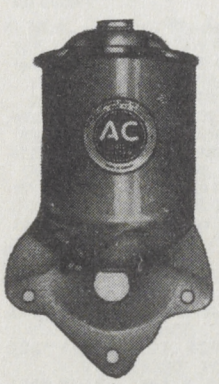


TYPE F-1004

FORD V8 - MERCURY

Same as type F-1001 with special heavy gauge welded bracket, flexible lines and fittings.
(Alternate installation to F-1009).
Smaller in capacity and lower in price than F-1009.

Replacement Element Type F-1026



TYPE F-1008

FORD V8 - 85 - MERCURY '42

Same as type F-1009 with metal oil lines included and oil is returned into oil pan.

This type fits only those 1942 and later models with oil return boss on oil pan.

Replacement Element Type C-204



TYPE F-1000

Replaces throw-away type filters on Dodge, Plymouth, Chrysler, DeSoto and Packard cars.
Assured efficiency in operation.
Popularly priced.

WE DO NOT SELL YOUR CUSTOMERS.

REPLACEMENT ELEMENTS

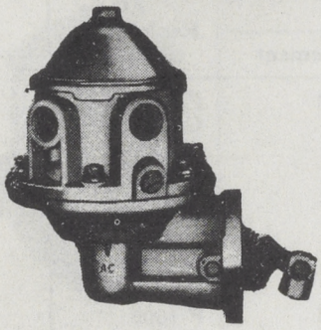
For PASSENGER CARS, TRUCKS AND BUSES

Make	Year	Model	Original		AC Replacement Element
			Filter	Element	
BUICK	1933-36	All	AC	W-21	F-1000
(Pass. Car)	1936-42	All (Partial Equipment)	AC	C-11	C-112
CADILLAC	1938	V16-90	Fram	C-4	C-204
(Pass.Car)	1939-40	V16-90	AC	C-11	C-112
CHEVROLET	1941-42	Partial Equipment (when AC equipped)	AC	C-11	C-112
(Truck)	1942-49	(except C.O.E.) (Partial)	AC	C-25	C-117
	1942-46	C.O.E.	AC	C-12	C-115
(Bus)	1940-42	WC, YT, MT, MY	AC or AC	W-21 / C-10	F-1000 / C-113
	1942-47	MT, MY, PL, PK	AC	C-25	C-117
CHRYSLER	1936-42	All	Puro.	EN-½	F-1000
(Pass. Car)	1946	6 cyl.	Puro.	PR-½	F-1000
	1946	8 cyl.	Chryco	1123387	PF-317
	1947-49	All	Chryco	1123387	PF-317
(Marine)	1940-45	Ace, Crown, Royal 8	Puro.	N-16	C-302
(Industrial)	1942	C36	Deluxe	J.C.	C-231
	1947	IND218, 236, 250	Puro.	PR-½	F-1000
		IND12	Chryco	1123387	PF-317
		IND14	Puro.	P-90	C-318
DODGE	1934-49	All	Puro.	PR-½	F-1000
(Pass. Cars)					
(Truck)	1933-42	Most Models	Puro.	PR-½	F-1000
	1939	TL, TK	Deluxe	J.C.	C-231
	1937-41	MK, RO, RD, T, TK, TL, VL, VK, WL, WK	Puro.	N-16	C-302
	1942	WLD, WKD	Deluxe	S.D.	C-233
	1943-45	Partial Equipment	Kral.	923768	C-112
	1946	All Models except T-180 & T-200	Puro.	PR-½	F-1000
	1946	T-180, T-200	Puro.	P-70	C-316
	1947	T-120, T-135	Puro.	P-90	C-318
	1947	T-137 Power Wagon	Deluxe	J.C.	C-231
	1949	All			C-316
	1949	All (Optional Equipment Filter)	Puro.	P-90	C-318
(Diesel Eng.)		TKD, TKDA, VKD, VKDA, WKD, WKDA	Deluxe	S.D.	C-233
FORD	1939-40	All Models (Partial Equipment)	Kral.	C91A-18697	F-1027
(Pass. Cars)	1941-42	All Models (Partial Equipment)	Kral.	C01A-18697	C-204
	1946-49	All	Kral.	C51A-18697	C-204
(Truck & Bus)	1938-40	All	Kral.	C91A-18697	F-1027
	1941-42	All models exc. with 4 cyl. eng.	Kral.	C01A-18697	C-204
	1943-45	When equipped with C01A-18659 Filter	Kral.	C01A-18697	C-204
	1943-45	When equipped with C11Q-18659 Filter	Kral.	C11Q-18697	C-112
	1946-49	All models except C.O.E.	Kral.	C51T-18697	C-117
	1939-47	C.O.E.	Fram.	11W-18697	C-206
	1941-42	Using 4 Cyl. Engine	Fram.	9N-18662	C-203
(Tractor)	1946-49	2N, 8N	Fram.	9N-18662	CT-203
G.M.C.	1938-39	F-16, F16H, T16, T16H	AC	C-10	C-113
(Truck)	1938-44	96H, 97	AC	C-11	C-112
	1942-49	91-93-94-95-96 (Partial)	AC	C-25	C-117
	1945-49	97, CC-450, EC-450, FC-450	AC	C-25	C-117
	1946	98 (Partial)	AC	C-10	C-113
	1939-48	ADC-750, 900; ADCR-750, 900; ADCW-970, ADF-750; ADFR-750	AC	C-13	C-121
		EC-280, EY-800, EY-850	AC	C-25	C-117
		EC-100, EC-150, EC-250, EC-300	AC	C-11 or C-25	C-112 / C-117
		Using 228, 236 Eng.	AC	C-11	C-112
		Using 248 Engine	AC	C-11 or C-25	C-112 / C-117
		Using 278, 308, 361 Engine	AC	C-10	C-113
		Using 426 Engine	AC	C-10 or C-13	C-113 / C-121
		Using 451, 477 Engine	AC	C-13	C-121
		Using 270 engine	AC	C-25	C-117
	1945-46	Diesel	AC	C-25	C-117
OLDSMOBILE	1939-47	All (Partial Equipment)	AC	C-11	C-112
(Pass. Cars)	1949	8 cyl.	AC	PF-122	PF-122

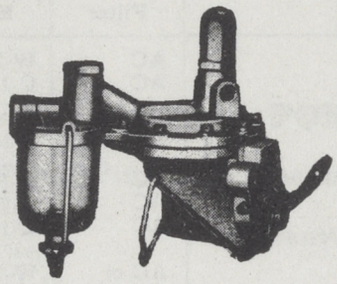
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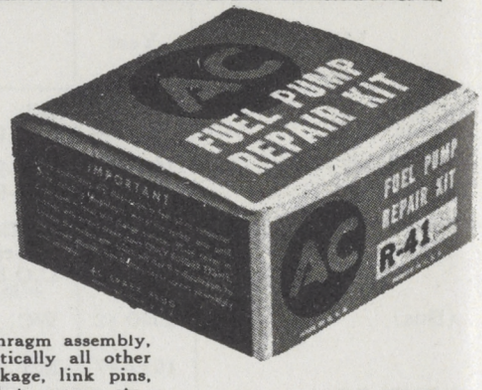
AC FUEL PUMP SPECIFICATION CHART



Type 541



Type 544



Contains one complete diaphragm assembly, diaphragm spring, and practically all other internal parts, including linkage, link pins, valves, mounting gasket, gaskets, screen, etc., except rocker arm, for most types of fuel pumps.

Make Year Model	Order Pump Type No.	REPAIR KITS Without Rocker Arm
BUICK		
1935/45	408	R-79
44	421	—
46; 49	420	R-52
1936-37/44	423 or 421	—
46; 48; 49	422	R-24
1938/44 first jobs	423 or 421	—
44 after jobs	504	R-21
44	3687	R-30
46; 48; 49	422	R-24
1939/44	504	R-21
44 auto Trans.	3687	R-30
Optional Equipment	3927	R-30
46; 48; 49	518	R-16
1940/44-45 first jobs	519	R-30
44-45 after jobs	529	R-30
46-47-48-49 first jobs	520	R-30
46-47-48-49 after jobs	530	R-30
1941-49/44-45	529	R-30
1941-49/All others	530	R-30
CHEVROLET PASSENGER		
1929-33/All	405	R-79
1934/All	417	R-13
1935-36/All	421	—
1937-49/Series 10-12 (Std.)	429	R-21
(Opt.)	9126	R-134
CHRYSLER		
1936/C7	436	R-81
	436	—
1936/C8	473	—
1936/C8 Chrysler 8; C9 Airflow	492	R-51
(After 1st 700 vehicles)	492	—
1936/C9 Airflow	468	—
	489	R-51
1936/C10, C11 Airflow	489	R-51
	489	—
1936 thru 1940/DC Marine	512	R-79
1937/CM; P1000; PA500	449	R-79
1937/C14; C15	473	—
1937/C16	428 or 587	R-79
	489	R-51
1937/C16 Airflow	489	—
	492	R-51
1937/C14 Imperial	492	—
	—	R-81
1937/C16	436	—
1937/C15	3188 or 9330	R-18
1938/C19; C20	473	—

Make Year Model	Order Pump Type No.	Without Rocker Arm
CHRYSLER—(Cont.)		
1938/C19 (Optional Equipment)	492	—
	436	R-81
1938/C18 (Optional Eqpt. to 11-1-37)	436	—
	506	R-85
1938/C18 (Opt. Eqpt. after 11-1-37)	506	R-85
1938/C18 (Part) (after 11-1-37)	505 or 588	R-15
1938/Z Ind. Eng. (Part)	3346	—
1938-39/C23; C24	473	—
1938-39-40/CV Marine	6194	R-79
1938-39-40/C18; C25	428 or 587	R-79
1939/C22	506	R-85
	514 or 590	R-128
1939/C23; C24	514 or 590	R-128
	505 or 588	R-15
1940/C25	505 or 588	R-15
1940/C-25 (with swing Windshield)	506	R-85
	514 or 590	R-128
1940/C26; C27	514 or 590	R-128
1941/C28 1942/C34	505 or 588	R-15
1941/C30; C33 1942/C36; C37	514 or 590	R-128
1946/C38	505 or 588	R-15
1947-48/C38	577 or 588	R-113
1946-47/C39	514 or 590	R-128
1948-49/8 cyl.	514 or 590	—
1949/6 cyl.	577 or 588	R-113
DE SOTO		
1936/S1 Airstream; S2 Airflow	425	R-79
1936/S1 Airstream; S2 Airflow 1937/S3	428 or 587	R-79
	436	R-81
1937/S3 1938/S5 (Opt. Eqpt. to 11-1-37)	436	—
	506	R-85
1938/S5 (Opt. after 11-1-37)	506	R-85
1938/S5 (Part)	428 or 587	R-79
1938/S5 (after 11-1-37)	505 or 588	R-15
	505 or 588	R-15
1939-40/SG 1940/S7	505 or 588	R-15
1939/S6 .with swing Windshield 1940/S7 .with swing Windshield 1940/S8 .with swing Windshield	506	R-85
	505 or 588	R-15
1941/S8		

DO YOU NEED MORE ORDER FORMS OR ENVELOPES?

FUEL PUMP SPECIFICATION CHART (Continued)

Make Year Model	Order Pump Type No.	REPAIR KITS Without Rocker Arm
DE SOTO (Cont.)		
1942 /S10	505 or 588	R-15
1946 /S11	505 or 588	R-15
1947-49 /All	577 or 588	R-113
DODGE		
1935 /DU	419	R-79
1936 /D1; D2	425	R-79
1936 /D1; D2		
1937 /D5	423 or 587	R-79
	436	R-81
1937 /D5 (Opt. Eqpt.)		
1938 D8 (Opt. Eqpt. to 11-1-37)	436	—
	506	R-85
1938 D8 (Opt. Eqpt. after 11-1-37)		
	506	R-85
1938 /D8 (Part)	423 or 587	R-79
1938 /D8 (After 11-1-37)		
1939 /D12; D13	505 or 588	R-15
1939 /D12; D13	428 or 587	R-79
1939 /D12; D13 (Opt. Eqpt.)	3885 or 9343	R-81
	505 or 588	R-15
1939 /D11		
	505 or 588	R-15
1940 /D14; D17		
1941 /D18	505 or 588	R-15
1942 /D22		
	506	R-85
1942 /D22 (Spl. Eqpt.)		
	506	R-85
1946 /D24	505 or 588	R-15
1947-49 /All	577 or 588	R-113
FORD & MERCURY CARS		
Engine—4 cyl.		
1932-34 /Model B	406	R-52
1941-42 /Models 1N; 2N	7465	—
Engine—6-90	543	—
1941-47 /Models 1GA; 2GA; 6 GA		
	543	—
1947-49 /All 6 cyl. (Vac. Cont. Dist.)	592	—
Engine V8-80, 85, 90, 95, 100; M	1125	—
1932 /Models 18, V8-40	409	—
	591	—
1934-37 /Models V8-40, 48, 68, 78	591	—
	591	—
	591	—
1938-39 Models 81A, 91A, 99A	591	—
	591	—
1940 /Models 01A, 09A	541 or 591	—
1941-2-6 Models 11A, 19A, 21A, 29A, M, 69A, 69M	541 or 591	—
	571	—
1947-48 /Mdls. 51A-Ford 8, 51C-Com.	571	—
1949 /Ford 6 cyl.		
Std. Equipment	592	—
Opt. Equipment	9443	R-140
Ford 8 cyl.		
Std. Equipment	578	R-118
Opt. Equipment	586	R-131
	9268	R-131
1949 /Mercury & Monarch V8		
	578	R-118
HUDSON		
1935 /GH; HHU; Ht; HU		
1936 /63; 64; 65; 66; 67	459	R-12
1937 /74; 76; 77; 85;		
1939 /95; 97	3313	R-33
1937 /70; 73; 74; 76; 77; 85; Comm. Car 6 cyl.	499	R-34
1937 /Custom 6-73; 8-77; 8-85; DeLuxe 8-74; 8-76	3290 or 9334	R-25
1938 /80; 84; 85; 87; 88 Comm. Car (Opt. Eqpt.)		
1938 /80; 84; 85; 87; 88 Comm. Car	499	R-34
1938 /112	509	R-21

Make Year Model	Order Pump Type No.	Without Rocker Arm
HUDSON (Cont.)		
1939 /90; 92P; 98		
1939 /95; 97 (Opt. Eqpt.)	3936	R-30
1939 /92-93-95-97	499	R-34
1939 /90; 92; 93; 98 (Opt. Eqpt.)		
1940 /40; 41; 43 (Opt. Eqpt.)	579	R-30
1940 /40	509	R-21
1940 /41; 43; 44; 45; 47	499	R-34
1940 /44; 45; 47 (Opt. Eqpt.)		
1941 /14; 15; 17 (Opt. Eqpt.)	3936	R-30
1941 /10; 11; 12; 13; 14; 15; 17; 18	499	R-34
1941 /11; 12; 13; 18; (Opt. Eqpt.)	579	R-30
1941-42 /10	509	R-21
1942 /20; 21; 22; 24; 25; 27; 28	499	R-34
1942 /21; 22; 28 (Opt. Eqpt.)	579	R-30
1942 /24; 25; 27 (Opt. Eqpt.)	3936	R-30
1946-47 /All (Std. Eqpt)	499	R-34
1946-47 /All 6 cyl. (Opt. Eqpt.)	579	R-30
1946-47 /All, 8 cyl. (Opt. Eqpt.)	3936	R-30
1948-49 /All Models (Comb. Pump)	583	R-139
1948-49 /All Models (Single Pump)	584	R-14
NASH		
1935 /3520	483	R-28
	483	—
	482	R-12
	482	—
1935 /3540; Series 400	482	R-28
	484	R-12
	484	—
1935 /3580	484	R-12
	483	R-28
1936 /3620	483	—
	482	R-12
	482	—
1936 /3640; Series 400	482	R-28
	484	R-28
1936 /3680; Adv. 8; Amb. 8	484	—
	498	R-28
	498	—
1937 /3720	498	R-28
1937 /3720	485	R-35
	485	R-35
1937 /3780 (Part)	485	—
	3236 or 9346	R-35
1937 /3780 (Part)	500	R-35
	500	R-35
1938-39-40 /3820; 3920; 4020	500	—
	498	R-28
1938-39-40 /3820; 3920; 4020 (Opt. Equipment)	485	R-35
	485	—
1938-39-40 /3880; 3980; 4080	500	R-35
	500	—
1941-42 /4180; 4280	500	R-35
	500	—
1941-42 /4140; 4240	532	R-28
1941-42 /4140; 4240 Spl.	532	—
	7406	R-30
1941-42 /4160; 4260	533	R-28
1941-42 /4160; 4260 Spl.	533	—

FUEL PUMP SPECIFICATION CHART (Continued)

Make Year Model	Order Pump Type No.	REPAIR KITS Without Rocker Arm
NASH—(Cont.)		
1941-42 /4180; 4280	534	R-28
	534	—
1946 /4640; 1947 /4740	532	R-28
	532	—
1946 /4640 O'D'r; 1947 /4740	7406	R-30
1946 /4660; 1947 /4760	533	R-28
	533	—
1946 /4660 O'D'r.; 1947 /4760	8780	R-130
1947 /6-4760 Amb. (with O'D'r)	585	R-130
1948-49 /4860; 4960 (without O'D'r)	533	R-28
	533	—
1948-49 /4840; 4940 (without O'D'r)	532	R-28
	532	—
1948-49 /4840, 4940 (with O'D'r.)	7406	R-30
1948-49 /4860; 4960 (with O'D'r.)	585	R-124
OLDSMOBILE		
1935 /36	472	R-11
1935 /38	434	R-67
1936 /36	427	R-67
1937 /36-38	496	R-128
	496	R-14
1937 /36-38	431	R-30
1938 /36-38	496	R-128
	496	R-14
1938 /36-38	431	R-30
1939 /35-36	496	R-128
	496	R-14
1939 /35-36	515	R-30
	515	R-30
1939 /38 (Use Adapter AD2)	516	R-30
1940 /35; 36	523	R-30
1940 /39 (Use Adaptor AD2)	516	R-30
1941-48 /6 cyl.	536	R-30
1941-48 /8 cyl.	535	R-30
1949 /35, 6 cyl.	9297	—
1949 /37-38, 8 cyl.	9294	R-137
PACKARD		
1938 /1603; 1604; 1605	494	R-83
1938 /1606; 1607; 1608	1778	R-51
1939 /1700; 1701; 1702	508	R-30
1939 /1703; 1705	517	R-30
1939 /1706; 1707; 1708	1778	R-51
	524	R-15
1940 /1800	524	R-15
1940 /1801; 1802	525	R-14
1940 /1803; 1804; 1805; 1806; 1807	508	R-30
1941 /1900	524	R-15
1941 /1901; 1902; 1951	525	R-14
1941 /1903; 1904; 1905; 1906	537	R-30
1942-47 /110	524	R-15
1942-47 /120; Clipper 8	525	R-14
1942-47 /Sup. 8	545	R-14
1946 /2100; 2130	524	R-15
1946-47 /2101; 2111	525	R-14
1946-47 /2103; 2106; 2126	545	R-14
1947-48 /Marine Eng. 1M-356 8 cyl.	545	R-14
1947 /All Models	508	R-30
1947-48 6 cyl. Clipper 2100; AT2130; Taxi Marine 1M-245	524	R-15
1948 /2201; 2211; 2202; 2232; 2222; 8 cyl.	508	R-30
	508	R-30

Make Year Model	Order Pump Type No.	Without Rocker Arm
PACKARD—(Cont.)		
1948 /2220; 2240 Taxi 1949 /Models 2301; 2311; 2302; 2232; 6 cyl. Taxi Cab 2300; 2320	508	R-30
1948 /2206; 2213; 2226; 2233 Cust. 8 cyl. 1949 /2306; 2313; 2333 Cust. 8 cyl.	9116	—
PONTIAC		
1935 /20; 21; 22	424	R-12
1936 /26; 27; 28	424	R-12
1937 /26	429	R-21
	430	R-128
1937 /28	493	R-30
1938 /25-26	429	R-21
	430	R-128
1938 /28	493	R-30
1939 /22-(25 Can.)	429	R-21
1939 /25USA-26-28 before No. 66539	496	R-128
25USA-26-28 after No. 66539	496	R-14
25USA-26-28 before 421000	515	R-30
25USA-26-28 after 421000	515	R-30
1940 /22-22S	429	R-21
1940 /25-26-28	515	R-30
	496	R-14
1940 /29	516	R-30
1941-48 /20-22	7447	R-34
1941-42 /25	496	R-14
1946-48 /25-26	496	R-14
1946 /28	539	R-30
1947-48 /28	539	R-30
1949 /20-22-25	7342	R-14
1949 /20-22-25 (Optional)	539	R-30
1949 /27	539	R-30
PLYMOUTH		
1936 /P1; P2 (Part) 1937 /P3; P4	428 or 587	R-79
	436	R-81
1937 /P3; P4 1935 /P5; P6; (Early)	436	—
	506	R-85
1938 /P5; P6 (Late)	506	R-85
1938 /P5; P6	428 or 587	R-79
1939 /P7; P8	505 or 588	R-15
	506	R-85
1939 /Spl. P7; P8	506	R-85
1939 /P7; P8 (Optional)	3885 or 9343	R-81
1940 /P9; P10; P15	505 or 588	R-15
	506	R-85
1940 /P9; P10; P-15 Spl.	506	R-85
1940 /Commercial	428 or 587	R-79
1941 /P11; P12	505 or 588	R-15
	506	R-85
1941 /P11; P12	506	R-85
1942 /P14	505 or 588	R-15
	506	R-85
1942 /P14 (Special)	506	R-85
1942 /P125 Comm.	428 or 587	R-79
1946 /P15	505 or 588	R-15
1947-48 /P15	577 or 588	R-113
1949 /All (Std. Equipment)	577 or 588	R-113
1949 /All (Optional Equipment)	9418	R-152

ALL ORDERS RECEIVE CAREFUL ATTENTION.

FUEL PUMP SPECIFICATION CHART (Continued)

Make Year Model	Order Pump Type No.	REPAIR KITS Without Rocker Arm
STUDEBAKER		
1938 /President	471	—
		—
1938 /7A; 8A; K5	487	—
1938 /Optional Equipment	2228 or 9326	R-35
	471	R-36
1939 /5C President, (Early)	471	—
1939 /5C President, (Late)	528	R-29
	487	—
1939-40 /Commander; K5	487	—
1939-40 /K5 (Optional Equipment)	2228	R-35
1939-42 /G Champion	527	R-28
1940-42 /President	528	R-29
	540	—
1941-42 /Commander	540	—
	540	—
1942-43 /Spl. Equipment	3713	R-79
1946 /5G	527	—
1942 /Champion 1946 /Champion 5G	527	R-28
	576	—
1946-49 /Champion (Std. Equipment)	576	—
1948-49 /Opt. Eqpt. for Champion	9218	R-129
	540	—
1947 /14A	540	—
	540	—
1948-49 /Commander	9217	R-129

Make Year Model	Order Pump Type No.	Without Rocker Arm
WILLYS OVERLAND		
1931-32 /97; 98D; 880; C113; C131; C157; T151 1932 /6-90; 8-88	5972	R-79
1933 /77, 4 cyl. (Part)	470	—
	502	R-10
1933-34 99, 6 cyl.	502	—
	502	R-10
1933-36 /77	460	—
1937 /6-90A; 8-88A	5972	R-79
	5972	—
1937 /77S; 37 1938 /Pass. & Panel Delivery 1939 /All 1940 /Willys Speed'y & DeLuxe	461	R-21
1941 /All Models (Opt. Equipment)	7409 or 9306	R-17
1941-42 /All; Pass. & Panel Delivery	538	R-21
1942 /Spl. Equipment	7409 or 9306	R-17
1943 /Recon	8312	R-102
1944 /¼ 4 x 4 Trucks 1945 /½ Ton 4 x 4	8312	R-102
1946-48 /CJ-2A	572	R-102
1946-48 /Mod. CJ-2 Civilian Post War Jeep ;4-63 Stn. Wgn.	7409 or 9306	R-17
1946-49 /Mdl. 4T, 2T Trucks	9106 or 9307	R-17
1947 /6-63	574	
1948 /6 cyl. Station Wagon	9245	R-105
1949 /Mdls. CJ-3A; 4 x 4 63	9353	
1949 /Model 463 Model VJ-2 Jeepster	9306	R-142
1949 /Model 663	9245	R-105

FUEL PUMPS - CONSUMER LIST PRICE

Pump Type No.	Price	Pump Type No.	Price	Pump Type No.	Price	Pump Type No.	Price	Pump Type No.	Price	Pump Type No.	Price	Pump Type No.	Price
405	8.70	431	21.75	493	21.75	520	21.75	540	6.75	3346	17.40	9116	21.75
408	11.60	434	25.40	496	11.60	524	11.60	545	13.80	3687	21.75	9126	25.40
417	6.75	436	25.40	498	9.45	525	13.80	572	6.75	3713	12.35	9217	21.75
419	10.15	449	13.80	500	25.40	527	6.75	574	11.60	3885	21.75	9218	21.75
420	25.40	460	13.80	502	11.60	528	13.80	576	9.45	3927	21.75	9245	21.75
421	6.75	461	6.75	504	6.75	529	21.75	577	7.50	5972	12.35	9297	25.40
422	25.40	468	17.40	505	7.50	530	21.75	585	25.40	6194	12.35	9306	21.75
423	6.75	470	13.80	506	21.75	532	9.45	587	8.70	7342	11.50	9307	21.75
424	9.45	471	25.40	508	21.75	533	9.45	588	7.50	7390	21.75	9326	21.75
425	9.45	472	13.80	512	10.15	534	10.15	590	13.80	7406	21.75	9330	21.75
426	25.40	473	17.40	514	13.80	535	21.75	1778	13.80	7409	21.75	9339	21.75
427	25.40	485	25.40	515	21.75	536	21.75	1791	12.35	7447	17.40	9343	21.75
428	8.70	487	9.45	516	21.75	537	21.75	2188	12.35	8312	14.50	9353	25.40
429	6.75	489	25.40	518	25.40	538	6.75	2228	21.75	8780	25.40	9418	21.75
430	12.35	492	25.40	519	21.75	539	21.75	3188	21.75	9106	21.75	9245	21.75

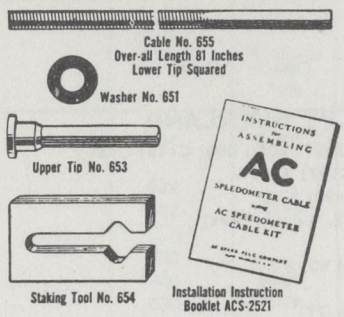
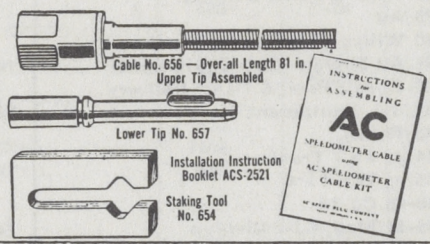
REPAIR KITS WITHOUT ROCKER ARM - CONSUMER LIST PRICE

Type	Price	Type	Price	Type	Price	Type	Price	Type	Price	Type	Price	Type	Price
R-10	3.15	R-15	3.65	R-25	5.40	R-35	5.30	R-81	8.25	R-118	2.80	R-137	9.15
R-11	3.15	R-16	5.85	R-28	2.70	R-36	4.45	R-83	4.95	R-124	3.40	R-139	7.00
R-12	2.45	R-17	5.40	R-29	2.90	R-51	5.35	R-85	6.25	R-128	3.60	R-140	8.55
R-13	2.45	R-18	3.15	R-30	9.55	R-52	3.15	R-102	2.80	R-129	6.95	R-142	6.20
R-14	4.40	R-21	2.90	R-33	4.10	R-67	5.85	R-105	5.45	R-130	7.35	R-152	9.25
		R-24	5.85	R-34	3.15	R-79	3.75	R-113	2.80	R-134	8.15		

D. ACKLAND & SON, Limited
Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

CABLE and CASING ASSEMBLIES

AC CABLE KITS

Kit No.	Contents of Kit	Principal Market
615 List: $1.55		**BUICK**—1947-37 All **CADILLAC**—1947-46-42-41-40-39-38-37.- **CHEVROLET PASSENGER** 1950-37 All **CHEVROLET TRUCK** 1937-39, 13-14; 1940-45, 13-14-15; 1946-50, 11-13-14-15 **DODGE**—Pass.—All 1946-42-41; 1940 D-14, D-17; 1939 D-11, D-12; 1937-38 D-5, D-6, D-7, D-8, D-9; 1936 D-2; 1935 All. **FORD**—1946-42-41-40 Pass.; 1939 Pass. (Part) and Truck; 1938 Pass. and Truck; 1937 Pass. (Part); 1936-35 Pass.; 1934-33-32-31 Pass. **G.M.C. TRUCK**—1950-46, 91-93-94-95; 1945-40, 93-94-95; 1939-38, 93-94; 1937, T-14, T-15 **OLDSMOBILE** 1950-37 All **PLYMOUTH**—All 1947-46-42-41; 1940 P-9, P-10; 1939 P-7, P-8; 1938 P-6; 1937 P-3, P-4; 1936 P-1, P-2; 1935 All. **PONTIAC**—1950-37 All
618 List $1.55		**BUICK**—1936-35-31 All Models **CHEVROLET**—1936-35-34-33-32-31-30-29 All Models. **DODGE**—Pass.—1934 DR, DS; 1933 DP, DO, DQ; 1932 6 and 8 Cyl. **OLDSMOBILE**—1936-35-34-33-32-31-30 All Models. **PLYMOUTH**—1934 PE, PF; 1933 PC, PD. **PONTIAC**—1936-35-34 All; 1933 P-8; 1932 P-6 and P-8.

CABLES . . . FACTORY-ASSEMBLED

TYPE NO.	APPLICATION
601 List. $1.25	CADILLAC: 1938/61 CHEV. PASS.: 1939-48 CHEV. TRUCK 1939/13-14; 1940/13-14-15; 1947-48/13 All -14 (-21-22-23-24) G.M.C., Truck 1939/93-94; 1940/93-94-95; 1947-48/93 All -94 (-21-22-23-24) LA SALLE 1938/50 OLDSMOBILE 1939/35-36-38 HT Jobs; 1940/36 HT Jobs; 1941-42/35-36-39 HT Jobs; 1946-47/35-36-38-39HT Jobs; 1948/34-35-36-37 HT Jobs; 1949/35-37 HT Jobs; 1950/35-37 HT Jobs PONTIAC 1939/22-25; 1940/22-22S; 1941-48/20-22; 1949-50/25-27 HT Jobs
602 List. $1.25	BUICK: 1937: 44; 46 CADILLAC: 1939-40: 60; 75; 90; 1940: 60S CHEVROLET: 1937-38: Pass. CHEV., Truck SH All-SA-SD first job 1937 PONTIAC: 1939-40: 26; 1941-47: All exc. -20-22 1948: Std. Trans. exc. -20-22

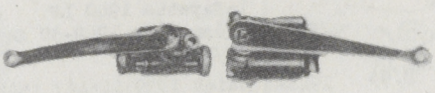
TYPE NO.	APPLICATION
603 List. $1.25	CADILLAC: 1938: 60 CHEVROLET: 1938: Truck 13-14 GMC: T14-T15 1937; 93-94 1938 OLDSMOBILE: 1940: 35, std. Trans.; 39 HT jobs; 1948 Mdl. 38 with Hydramatic Trans. 1950 38 exc. HT jobs: PONTIAC: 1938, 25
605 List. $1.60	GMC: 1938: AC650; ADC500; ADC550; T14; T145; T15; T155; T16; T16H; 1939: AC100, 150, 250, 300, 350; 1940: AC400, 450
608 List. $1.45	FORD HUDSON, Pass.: 1941-47 Std. NASH: 1941: 4160 O'Dr. & 4180; 1942: 4260 O'Dr. & 4280

TAILOR-MADE AC SPEEDOMETER CABLE-CASING ASSEMBLIES

Type No.	Cable Length	Casing Length	Principal Market	List Price
CC-1	68 5/8"	67 1/2"	Buick, Cadillac, Chevrolet, Hudson, Oldsmobile, Pontiac, Plymouth	3.10
CC-2	68 5/32"	67 1/4"	Buick, Cadillac, Chevrolet, Dodge (Trucks), GMC, Oldsmobile	3.95
CC-3	61 1/8"	60 5/16"	Chrysler, Dodge, DeSoto, Ford, Hudson, Plymouth	2.85
CC-4	71 1/8"	70 5/16"	Chrysler, Dodge, DeSoto, Ford, Plymouth	3.40

Hydraulic Shock Absorbers

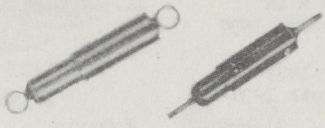
◆ DOUBLE-ACTING
Cast Iron Types



Used on:

Buick, rear
Cadillac, rear
Chevrolet, rear
Dodge Truck
Federal Truck
GMC Truck
IHC Truck
Oldsmobile, rear
Ford replacement
and many others

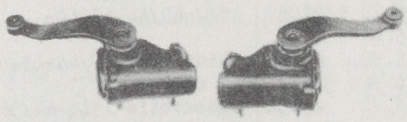
◆ DUODRAULIC TYPES
Direct Acting or Airplane



Used on:

Chrysler
De Soto
Dodge
Hudson
Kaiser & Fraser
Nash
Packard, rear
Plymouth
Pontiac, rear

◆ SINGLE-ACTING
Cast Iron Types



Used on:

Chevrolet ½-Ton
Chevrolet Mstr. & Std.
GMC ½-Ton
Ford replacement
and many older
model cars

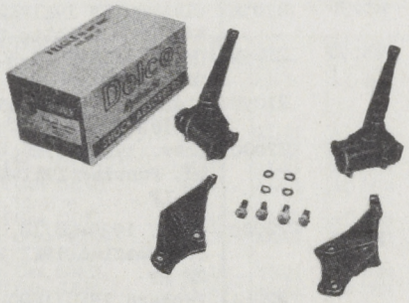
◆ KNEE ACTION TYPES
Front Absorbers



Used on:

Buick
Cadillac
Chevrolet
Nash
Oldsmobile
Packard
Pontiac

DELCO SHOCK ABSORBERS
for FORD and MERCURY
Passenger Cars



PROVIDE RIDING COMFORT EQUAL TO AMERICA'S MOST EXPENSIVE CARS

● PACKAGED COMPLETE WITH ALL NECESSARY PARTS

Delco shock absorbers for Ford and Mercury cars are packaged in half sets for either front or rear installation. A half set at a time can be installed making it economical for an owner to equip his car with Delco shock absorbers.

● EASY TO INSTALL

No holes to drill. Same bolt holes and same links already on the car are used. Simple instructions included in each set. Installation can be made in less than an hour by the average mechanic.

STANDARD INSTALLATION

Application	Front Set Complete	Retail Price	Rear Set Complete	Retail Price
1935-36 Ford	5302376	20.95	5302377	20.95
1937-38-39 Ford	5302376	20.95	5316430	20.95
1939 Mercury	5302376	20.95	5316430	20.95
1940 Ford & Mercury	5342567	20.95	5342568	20.95
1941 Ford & Mercury	5304436	20.95	5304438	20.95
1942 thru 48 Ford	5352980	20.95	5304438	20.95
1942 thru 48 Mercury	5352980	20.95	5304438	20.95

DELUXE INSTALLATION

Application	Front Set Complete	Retail Price	Rear Set Complete	Retail Price
1937-38-39 Ford	5326253	30.10	5326254	30.10
1939 Mercury	5326253	30.10	5326254	30.10
1940 Ford	5342416	30.10	5342415	30.10
1940 Mercury	5342416	30.10	5342415	30.10
1941 Ford & Mercury	5304437	30.10	5304439	30.10
1942 thru 48 Ford	5352973	30.10	5302499	30.10
1942 thru 48 Mercury	5352973	30.10	5302499	30.10

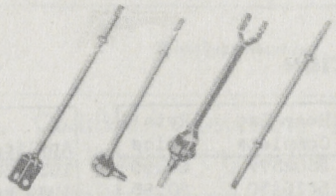
HEAVY-DUTY TRUCK INSTALLATION

Application	Front Set Complete	Retail Price	Rear Set Complete	Retail Price
1937-38-39, Ford Truck 1½ Ton	5335854	$46.15	5335865	$50.90
1940-41-42 & 1946, Ford Truck 1½ to 3 Ton	5334367	$77.50	5334368	$79.35

Popular Fast Moving DELCO Shock Absorbers
NUMERICAL LIST

890	Nash 1950 Model 40-60 R & RR	8.00
892	Nash 1950 Model 40-60 L & RF	8.00
945S	Buick 1938 R & LR	14.50
1030F	Chrysler, DeSoto 1937 R & LF	8.00
1030T	Chev. Master 1939-40; Dodge, Plymouth 1937-38 R & LF	8.00
1030V	Pontiac 1939/25 USA-26-28; 1940/25-26-28-29 R & LR	8.00
1031N	Hudson 1936 R & LR	8.00
1031S	Chev. 1938 with kick shackles; Hudson 1937-39 R & LR	8.00
1031T	Chrysler, DeSoto, Dodge, Plymouth, 1937-38 R & LR	7.35
1031U	Pontiac 1937; 1938/26-28 R & LR	8.00
1031V	Packard 1940; Kaiser & Frazer 1946-48 R & LR	8.00
1032E	Nash 1941-42/60-80 R & LR	8.00
1033DD	Nash 1939-40 R & LR	8.00
1034K	Hudson 1936 R & LF	8.00
1034R	Hudson 1937-39 R & LF	8.00
1035E	Nash 1946-47/60 R & LF	8.00
1035F	Nash 1946-48/40 R & LF	8.00
1036BB	Nash 1946-47/40 R & LR	8.00
1037C	Hudson 1940-48 R & LF	8.00
1038N	Nash 1941-42/40 R & LF	8.00
1040V	Packard 1942/2000-13-10-11 1946-48 R & LF	8.00
1041S	Hudson 1940-47 R & LR	8.00
1041W	Hudson 1948 R & LR	8.00
1042V	Packard 1941; 1942/2004-5-7-8 R & LR	8.00
1044V	Pontiac 1941-42/25; 1941-48/25-26-27-28 R & LR	7.35
1045CC	Nash 1946/40 R & LR	8.00
F1051R	Ford 1949 L & RR	7.50
F1051W	Mercury 1949 L & RR	7.50
1055F	Chev. Pass. Series 1012 1950; Series 20-22 1950 Pontiac L & RF	7.35
1060C	Chrysler, DeSoto, Dodge, Plymouth 1949 R & LF	6.70
1061T	Chrysler, DeSoto, Dodge, Plymouth 1949 R & LR	6.90
1065V	Chev. Pass. Series 1012 1950; Series 20-22 1950 Pontiac L & RR	8.00
1070T	Series 25-27 1950 L & RR	7.35
1075F	Ford-Mercury 1949 L & RF	8.00
1075G2	Series 25-27 1950 Pontiac L & RF	8.00
1085V	Chev. Pass. 1949; Pont. 1949/20-22 R & LF	7.35
1090EE	Nash 1949 Series 40 L & RF	8.00
1090CC	Nash 1949 Series 60 L & RR	8.00
1091CC	Nash 1949 Series 40 L & RR	8.00
1092E	Nash 1949 Series 60 L & RF	8.00
1431V	Chev. 1937, 1938/10 All-12 exc. kick shackle jobs; Pontiac 1938/25 exc. kick shackle jobs RR	8.95
1431W	Chev. 1937, 1938/10 All-12 exc. kick shackle jobs; Pontiac 1938/25 exc. kick shackle jobs LR	8.95
1433C	Chev. 1937, 1938/12 exc. kick shackle jobs; Pontiac 1938/25 exc. kick shackle jobs LF	7.50 8.95
1433D	Chev. 1937, 1938/12 exc. kick shackle jobs; Pontiac 1938/25 exc. kick shackle jobs RF	7.50
1713E	Oldsmobile 1937-38 RR	19.15
1713F	Oldsmobile 1937-38 LR	19.15
1751R	Buick 1939-40/48-49 RR	17.65
1751S	Buick 1939-40/48-49 LR	17.65
1751T	Oldsmobile 1939 LR	17.65
1751U	Oldsmobile 1939 RR	17.65
1754L	Oldsmobile early 1940 LR	18.70
1754M	Oldsmobile early 1940 RR	18.70
1757A	Buick 1941-42/48-49 RR	18.70
1757B	Buick 1941-42/48-49 LR	18.70
1757B	Buick 1941-42/48-49 LR	18.70
1932A	Buick 1935-36/44 LF	25.90
1932B	Buick 1935-36/44 RF	25.90
1933C	Buick 1940/48-49 LF	25.90
1933D	Buick 1940/48-49 RF	25.90
1942A	Oldsmobile, LaSalle, 1935; Cadillac 1936/60 early RF	19.95
1942B	Olds., LaSalle 1935; Cadillac 1936/60 early LF	19.95
1944A	Olds., LaSalle 1936; Cadillac 1936/60 late RF	21.40
1944B	Olds., La Salle, 1936; Cadillac 1936/60 late LF	21.40
1946J	Packard 1941 Clipper; 1942/2000-1-3-10-11; 1946-48 RF	25.90
1946K	Packard 1941 clipper; 1942/2000-1-3-10-11; 1946-48 LF	25.90
1946G	Cadillac 1940-49; LaSalle 1939-40 RF	25.90
1946H	Cadillac 1940-49; LaSalle 1939-40 LF	25.90
1947A	Buick 1937-38/44-46; Oldsmobile 1937-38; Pontiac 1937, 1938/26-28 RF	16.75
1947B	Buick 1937-38/44-46; Oldsmobile 1937-38; Pontiac 1937, 1938/26-29 LF	16.75
1947C	Oldsmobile 1939-38, 1949/38; Pontiac 1939-40/25-26-28; 1941-42/25; 1946-48/25-26-27-28; Nash &Lafayette 1940 RF	19.40
1947D	Olds. 1939-48; 1949/38; Pontiac 1939-40/25-26-28; 1941-42/25; 1946-48/25-26-27-28; Nash & Lafayette 1940 LF	19.40
1947K	Oldsmobile 1949-50 Series 35/37 LF	25.90
1948A	Buick 1939/44-46; 1940/44-45-46-47; 1941 R & LF	20.95
1960C	Packard 1937 RF	25.90
1960D	Packard 1937 LF	25.90
1966C	Packard 1939 RF; 1941 1942/2004-5-7-8 LF	27.65
1966D	Packard 1939 LF; 1941; 1942/2004-5-6-8 RF	27.65
2100A	Chev. 1939-48; Pontiac 1939-40/22; 1941 48/20-22 RR	11.95
2103F	Buick 1939/44-46 LR	16.35
2105A	Buick 1940-41/44-45-46 47 RR	16.35
2105B	Buick 1940-41/44-45-46-47 LR	15.00
2105C	Buick 1942-49/44-45-46-47 RR	13.75
2105D	1942-49/44-45-46- Buick 1942-49/44-45-46-47 LR	13.75
2105E	Oldsmobile 1941-42/36-39 with 5 hub bolts 1946-47/36-38-39; 1948/34-36-38; 1949/38 LR	16.35
2105G	Oldsmobile 1941-42/35 with 5 hub bolts; 1946-47/35; 1948/35-37 RR	13.75
2105H	Oldsmobile 1941-42/35 with 5 Hub bolts; 1946-47/35; 1948/35-37 LR	13.75
2105J	Oldsmobile 1941-42/36 with 6 hub bolts RR	16.35
2105K	Oldsmobile 1941-42/36 with 6 hub bolts LR	15.00
2105L	Oldsmobile 1941-42/35 with 6 hub bolts RR	13.75
2105M	Oldsmobile 1941-42/35 with 6 hub bolts LR	13.75
2105N	Oldsmobile 1949-50 Series 25/37 RR	13.75
2105P	Oldsmobile 1949-50 Series 35/37 LR	13.75
2200C	Chev. 1949-40/10, 1941-48; Pontiac 1941-48/20-22 LF	16.75
2200D	Chev. 1939-40/10, 1941-48; Pontiac 1941 48/20-22 RF	16.75
2206A	Packard 1940/1800-1801-1803 RF	22.10
2206V	Packard 1940/1800-1801-1803 LF	22.10

SHOCK ABSORBER LINKS

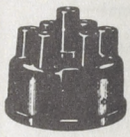


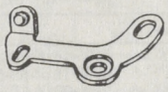
◆When servicing or replacing Delco Shock Absorbers always check rear connecting links. New links are inexpensive and provide noise free, positive action of the shock absorber.

Part No.	Application	Retail Price
5316440	Chev. 1938 without kick shackles; Pontiac 1938/25 without kick shackles.	1.15
5325622	Olds. 1940/36 late.	1.45
5328558	Olds. 1940/36 early.	1.45
5328600	Chev. 1939-41; Pontiac 1939-40/22, 1941/20-22	1.05
5342421	Buick 1941-42/49	2.05
5352068	Buick 1941/42-44-45-46-47, 1942-49/44 45-46-47	1.80
5352365	Olds. 1941-49	1.45
44678	Chev. 1937-38/12 without kick shackles. Pontiac 1938/25 without kick shackles	1.15
5309733	Buick 1940/44-45-46-47.	1.35
5309734	Buick 1939; 1940/48-49	1.35
5313880	Olds. 1939-40/35-39; Pontiac 1939/25 Canadian	1.45
5315895	Olds. 1938	1.45
5316364	Chev. 1942-48; Pontiac 1942-1948/20-22	1.65

OUR SALESMEN GET CREDIT FOR ORDERS YOU PHONE OR MAIL.

REPLACEMENT IGNITION PARTS FOR AUTO-LITE AND FORD

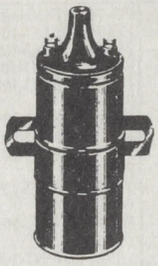

AL-104

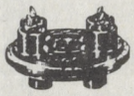

AL-23

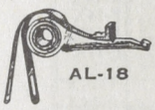

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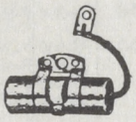

FO-75


AL-99


FC-5


FO-74


AL-18


ALC-114


FO-71


FOC-105

PASSENGER CARS

DESCRIPTION		IGNITION DISTRIBUTOR PARTS						COIL	STARTER PARTS			GENERATOR PARTS			
Year	Model	Arm	Bar or Screw	Contact Set No.	Rotor	Cap	Condenser		Starter Switch	Motor Brush (4)	Motor Brush Set No.	Cut-out or Req.	Gen. Brush (2)	Control Brush	Gen. Brush Set No.
CHRYSLER															
1935	8 Cyl. CI-CZ., C3	AL-18	AL-9	AL-1890	AL-99	AL-106	ALC-115	LC-12H	.....	E-37-38	E-37X	VR-1	E-39	E-39C	E-39X
1935	6 Cyl. C-6	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-12H	.....	E-37-38	E-37X	VR-1	E-39	E-39C	E-39X
1936	C7, 6 Cyl.	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16H	.....	E-37-38	E-37X	VR-1	E-39	E-39C	E-39X
1936	C8, C9, C10, C11, 8 Cyl.	AL-18	AL-9	AL-1890	AL-99	AL-106	ALC-115	LC-16H	.....	E-37-38	E-37X	VR-1	E-39	E-39C	E-39X
1937-38	Royal C16, C18	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16H	SW-52	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1937-38	Imp. C14, Cust. Imp. C15, Airflow C17, C19, C20	AL-18	AL-9	AL-1890	AL-99	AL-106	ALC-115	LC-12H	SW-52	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1939	Royal C22 6 Cyl.	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-12H	.....	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1939	Imp. C23, Imp. Cust. C24, 8 Cyl.	AL-18	AL-23	AL-1823	AL-99	AL-106	ALC-111	LC-16H	.....	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1940	C25, 6 Cyl.	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	.....	E-37-38	E-37X	VR-34	E-45	.....	E-45X
1940	C26, C27, 8 Cyl.	AL-18	AL-23	AL-1823	AL-99	AL-106	ALC-115	LC-16H	.....	E-37-38	E-37X	VR-34	E-45	.....	E-45X
1941-42	C28S, C28W, 6 Cyl.— (If Gen. GEB, GEG)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	.....	E-37-38	E-37X	VR-30	E-46	.....	E-46X
	(If Gen. GDZ)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	.....	E-37-38	E-37X	VR-34	E-45	.....	E-45X
1941-42	C30K, C30N, C33, 8 Cyl.— (If Gen. GEB, GEG)	AL-18	AL-23	AL-1823	AL-99	AL-106	ALC-111	LC-16	.....	E-37-38	E-37X	VR-30	E-46	.....	E-46X
	(If Gen. GDZ)	AL-18	AL-23	AL-1823	AL-99	AL-106	ALC-111	LC-16	.....	E-37-38	E-37X	VR-34	E-45	.....	E-45X
1948	All 6 cyl.	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	UC-1	.....	E-37-38	E-37X	VR-30	E-45		E-45X
1948	All 8 cyl.	AL-18	AL-23	AL-1823	AL-99	AL-106	ALC-111	UC-10	.....	E-37-38	E-37X	VR-30	E-45		E-45X
1949	All 6 cyl.	AL-18	AL-21	AL-1821	AL-97	AL-112	ALC-114	UC-1	.....	E-17-18T	E18-TX		E-45		E-45X
1949	All 8 cyl.	AL-18	AL-23	AL-1823	AL-99	AL-114	ALC-111	UC-10	.....	E-17-18T	E-18TX		E-45		E-45X
DE SOTO															
1935-36	DU-DV-6 Cyl.	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16	.....	E-37-38	E-37X	VR-1	E-39	E-39C	E-39X
1937-38	D5, D8	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1937-38	D6, D9	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16	SW-51	E-37-38	E-37X	GC-7	E-39	E-39C	E-39X
1939	D11, 11S (D11, 12, 13 Canada) (If Gen. GCB)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-30	E-46	.....	E-46X
	(If Gen. GDA)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-30	E-45	.....	E-45X
	(If Gen. GDF)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-11	E-43	E-43C	E-43X
	(If Gen. GBM)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	GC-7	E-39	E-39C	E-39X
1940	D14, 15, 17— (If Gen. GDZ)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-16-18	E-16X	VR-30	E-45	.....	E-45X
	(If Gen. GEB)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-16-18	E-16X	VR-30	E-46	.....	E-46X
1940-41	D14, 15, 16, 20, 21 (Canada) (If Gen. GDZ)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-34	E-45	.....	E-45X
	(If Gen. GEB)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-34	E-46	.....	E-46X
1941	D18, 19— (If Gen. GEB, GEG)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-16-18	E-16X	VR-34	E-46	.....	E-46X
	(If Gen. GDZ)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-16-18	E-16X	VR-34	E-45	.....	E-45X
1942	All	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1948	All models	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	UC-1	.....	E-37-38	E-37X	VR-30	E-45		E-45X
1949	All models	AL-18	AL-21	AL-1821	AL-97	AL-112	ALC-114	UC-1	.....	E-17-18T	E-18TX		E-45		E-45X
DURANT															
1928-29	J-70, 73, 6-17	AL-8	AL-9	AL-890	AL-77	AL-82	ALC-103	UC-1	SW-1	E-17-18	E-17X	GC-5	E-19	E-19C	E-19X
1929	60	AL-8	AL-9	AL-890	AL-77	AL-82	ALC-103	UC-1	SW-1	E-16-18	E-16X	GC-5	E-20	E-20C	E-20X
1929	66	AL-8	AL-9	AL-890	AL-77	AL-82	ALC-103	UC-1	SW-1	E-16-18	E-16X	GC-5	E-20	E-20C	E-20X
1929-30	63	AL-8	AL-9	AL-890	AL-77	AL-82	ALC-103	UC-1	SW-35	E-17-18	E-17X	GC-5	E-20	E-20C	E-20X
1930-31	4-07 & 6-10	AL-8	AL-9	AL-890	AL-77	AL-82	ALC-103	LC-3	SW-35	E-17-18	E-17X	GC-7	E-20	E-20C	E-20X
1930	6-12-14-15-6	AL-8	AL-9	AL-890	AL-77	AL-82	ALC-103	LC-3	SW-35	E-17-18	E-17X	GC-7	E-20	E-20C	E-20X
1932	6-18	AL-8	AL-9	AL-890	AL-77	AL-82	ALC-103	LC-3	SW-35	E-17-18	E-17X	GC-7	E-20	E-20C	E-20X
DODGE															
1935-36	6-SF-SG, S1-S2	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-1	E-39	E-39C	E-39X
1937-38	S3, S5	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1939	All	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1940-41	All— (If Gen. GEB, GEG)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-34	E-46	.....	E-46X
	(If Gen. GDZ)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-34	E-45	.....	E-45X
1942	All	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-51	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1948	All models	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	UC-1	SS-300	E-16-18	E-16X	VR-30	E-45	.....	E-45X
1949	All models	AL-18	AL-31	AL-1821	AL-97	AL-112	ALC-114	UC-1	SS-300	E-17-18	E-18TX		E-45	.....	E-45X
FORD															
1922-27	T	FO-3	FO-4	FO-340	.....	.....	.....	.....	SW-12	F-1	F-1X	GC-1	F-2	F-2C	F-2X
1928-29	A	FO-5	FO-6	FO-560	FO-71	FO-70	FOC-100	FC-5	SW-13	F-5-6	F-5X	GC-1	F-4(4)	F-4C	F-4X
1930-31	A	FO-5	FO-6	FO-560	FO-71	FO-70	FOC-100	FC-5	SW-13	F-5-6	F-5X	GC-1	F-7	F-7C	F-7X
1930-31	AA	FO-5	FO-6	FO-560	FO-71	FO-70	FOC-100	FC-5	SW-13	F-5-6	F-5X	GC-1	F-8	F-8C	F-8X
1932	B, BB	FO-7	FO-6	FO-760	FO-71	FO-70	FOC-101	FC-5	SW-15	F-5-6	F-5X	GC-1	F-8	F-8C	F-8X

D. ACKLAND & SON, Limited
Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

REPLACEMENT IGNITION PARTS FOR AUTO-LITE AND FORD

Year	Model	Arm	Bar or Screw	Contact Set No.	Rotor	Cap	Condenser	COIL	Starter Switch	Motor Brush (4)	Motor Brush Set No.	Cut-out or Req.	Gen. Brush (2)	Control Brush	Gen. Brush Set No.
FORD (Cont.)															
1932	V-8	FO-8	FO-9(2)	FO-890	FO-73	FO-74	FOC-102	FC-6	SW-16	F-5S-5T	F-5SX	GC-1	F-8	F-8C	F-8X
1933	V-8	FO-8	FO-9(2)	FO-890	DO-73	FO-74	FOC-102	FC-6	SW-16	F-5S-5T	F-5SX	GC-1	F-9	F-9C	F-9CX
1934	V-8	FO-10	FO-11(2)	FO-1011	FO-73	FO-74	FOC-102	FC-6	SW-37	F-5S-5T	F-5SX	GC-1	F-9	F-9C	F-9CX
1935	V-8	FO-10	FO-11(2)	FO-1011	FO-73	FO-74	FOC-103	FC-6	SW-37	F-5S-5T	F-5SX	GC-1	F-9	F-9C	F-9CX
1936	Early V-8	FO-10	FO-11(2)	FO-1011	FO-73	FO-74	FOC-103	FC-6	SW-39	F-5S-5T	F-5SX	GC-1	F-9	F-9C	F-9CX
1936	Late V-8 68	FO-12	FO-13L	FO-1213L		FO-76						GC-1			
		FO-12	FO-13R	FO-1213R	FO-75	FO-74A	FOC-104	FC-7	SW-39	F-5S-5T	F-5SX	VR-10	F-9	F-9C	F-9CX
1937–39	74, 78, 81A, 82A, 91A,	FO-12	FO-13L	FO-1213L		FO-76	FOC-105					GC-1			
	922A, 99A	FO-12	FO-13R	FO-1213R	FO-75	FO-74A	FOC-107	FC-8	SS-200	F-5S-5T	F-5SX	VR-10	F-9	F-9C	F-9CX
1939	85 De luxe,	FO-12	FO-13L	FO-1213L		FO-76									
	Mercury	FO-12	FO-13R	FO-1213R	FO-75	FO-74A	FOC-107	FC-8	SS-200	F-5S-5T	F-5SX	VR-31	F-13		F-13X
1940–41	60, 80, Mercury	FO-12	FO-13L	FO-1213L		FO-76									
		FO-12	FO-13R	FO-1213R	FO-75	FO-74A	FOC-107	FC-8	SS-200	F-5S-5T	F-5SX	VR-31	F-14	.....	F-14X
1942	4 Cyl.	FO-12	FO-13L	FO-1213L	.....	.....	.....	.....	SS-200	F-5S-5T	F-5TX	VR-31	F-14	.....	F-14X
1942	6 Cyl.	FO-12	FO-13L	FO-1213L	.....	.....	FOC-109	.....	SS-200	F-5S-5T	F-5TX	VR-31	F-14	.....	F-14X
1942	8 Cyl., Mercury	FO-12	FO-13L	FO-1213L	.....	.....	FOC-109	.....	SS-200	F-5S-5T	F-5TX	VR-31	F-14	.....	F-14X
		FO-12	FO-13R	FO-1213R											
1941–42	4 cyl.	FO-12	FO-13L	FO-1213L	FO-85	FO-88	FOC-108	.....	SS-200	F-5S-5T	F-5SX	VR-31	F-14	.....	F-14X
1948	Early 8 cyl.	FO-12	FO-13R	FO-1213R	FO-81	FO-80	FOC-109	FC-9	SS-200	F-5S-5T	F-5SX	VR-31	F-14	.....	F-14X
		FO-12	FO-13L	FO-1213L	.....	FO-80A									
1948–49	6 cyl.	FO-16	FO-15	FO-15	FO-83	FO-84	FOC-110	FC-10	SS-200	F-5S-5T	F-5SX	VR-31	F-14	.....	F-14X
1948–49	Late 8 cyl.	FO-16	FO-15	FO-15	FO-83	FO-86	FOC-110	FC-10	SS-200	F-5S-57	F-5SX	VR-31	F-14	.....	F-14X
HUDSON															
1927	O & S	AL-11	AL-2	AL-1120	AL-73	AL-76	ALC-101	UC-10	SW-3	B-72	B-72X	GC-5	B-73	B-73C	B-73X
1927–28	Super 6	AL-11	AL-9	AL-1190	AL-73	AL-76	ALC-101	UC-10	SW-3	B-72	B-72X	GC-5	B-75	B-75C	B-75X
1929	Super 6	AL-16	AL-9	AL-1690	AL-73	AL-76	ALC-101	UC-10	SW-3	R-72	B-72X	GC-5	B-73	B-73C	B-75X
1930–32	T, U, L	AL-17	AL-9	AL-1790											
		AL-17	AL-13	AL-1713	AL-79	AL-88	ALC-108	UC-10	SW-4	E-17-18	E-17X	GC-5	E-20	E-20C	E-20X
1933	32E Super 6	AL-17	AL-9	AL-1790	AL-77	AL-82	ALC-113	UC-10	.....	E-16-18	E-16X	GC-5	E-20M	E-20C	E-20MX
1933	Pacemaker 8	AL-18	AL-9	AL-1890											
		AL-18	AL-13	AL-1813	AL-79	AL-88	ALC-108	HSC-1	.....	E-17-18	E-17X	GC-5	E-20M	E-20C	E-20MX
1934	8 Cyl.	AL-18	AL-9	AL-1890	AL-79	AL-88	ALC-115	LC-3H	SS-100	E-17-18	E-17X	GC-5	E-20M	E-20C	E-20MX
1935	GH-Big 6	AL-17	AL-9	AL-1790	AL-93	AL-98	ALC-113	LC-16H	SS-100	E-17-18	E-17X	VR-4	E-20M	E-20C	E-20MX
1935	HT-8-HU-HHU	AL-18	AL-9	AL-1890	AL-79	AL-88	ALC-115	LC-12H	SS-100	E-17-18	E-17X	VR-4	E-20M	E-20C	E-20MX
1936	63, 6 Cyl.	AL-18	AL-9	AL-1890	AL-93	AL-98	ALC-113	LC-16H	SS-100	E-17-18	E-17X	VR-4	E-20M	E-20C	E-20MX
1936	64, 65, 66, 67, 8 Cyl.	AL-18	AL-9	AL-1890	AL-79	AL-88	ALC-115	LC-12H	SS-100	E-17-18	E-17X	VR-4	E-20M	E-20C	E-20MX
1937–38	73, 83	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-113	LC-16H	SS-100	E-17-18	E-17X	VR-13	E-43	E-43C	E-43X
1937–38	74, 75, 76, 77, 84, 85, 86, 87	AL-18	AL-9	AL-1890	AL-79	AL-88	ALC-115	LC-12H	SS-100	E-17-18	E-17X	VR-13	E-43	E-43C	R-43X
1938	112, 6 Cyl.	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-113	LC-12	.....	E-16-18	E-16X	VR-13	E-43	E-43C	E-43X
1939	90, 98, 112, 6 Cyl.	AL-22	AL-9	AL-2290	AL-93	AL-98	ALC-113	LC-12	.....	E-16-18	E-16X	VR-13	E-39	E-39C	E-39X
1939	94, 95, 96, 97, 8 Cyl.	AL-18	AL-9	AL-1890	AL-79	AL-88	ALC-115	LC-12H	SS-100	E-16-18	E-16X	VR-13	E-43	E-43C	E-43X
1939	92, 93, 6 Cyl.	AL-22	AL-9	AL-2290	AL-93	AL-98	ALC-115	LC-12	SS-100	E-16-18	E-16X	VR-13	E-44M	E-44C	E-44X
1939	91	AL-22	AL-9	AL-2290	AL-93	AL-98	ALC-113	LC-16	SS-100	E-16-18	E-16X	.....	E-43	E-43C	E-43X
1940	40, 6 Cyl.	AL-22	AL-9	AL-2290	AL-93	AL-98	ALC-108	LC-12	.....	E-16-18	E-16X	VR-13	E-43	E-43C	E-43X
1940	41, 42, 43, 6 Cyl.—														
	(If Gen. GEC)	AL-22	AL-9	AL-2290	AL-93	AL-98	ALC-108	LC-12	.....	E-16-18	E-16X	VR-11	E-43	E-43C	E-43X
	(If Gen. GEG)	AL-22	AL-9	AL-2290	AL-93	AL-98	ALC-108	LC-12	.....	E-16-18	E-16X	VR-30	E-46	.....	E-46X
1940–41	14, 15, 17, 44, 45, 46, 47,														
	8 Cyl.	AL-18	AL-9	AL-1890	AL-79	AL-88	ALC-115	LC-12H	.....	E-16-18	E-16X	VR-13	E-43	E-43C	E-43X
1941	10, 11, 12, 13, 18, 6 Cyl.	AL-22	AL-9	AL-2290	AL-93	AL-98	ALC-108	LC-12	SS-100	E-16-18	E-16X	VR-13	E-43	E-43C	E-43X
1942	6 Cyl.	AL-22	AL-9	AL-2290	AL-93	AL-98	ALC-108	LC-16	SS-100	E-16-18	E-16X	VR-4	E-43	E-43C	E-43X
1942	8 Cyl.	AL-18	AL-9	AL-1890	AL-79	AL-88	ALC-115	LC-12	SS-100	E-17-18	E-17X	VR-4	E-43	E-43C	E-43X
1948–49	6 cyl.	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	UC-1	SS-100	E-17-18	E-17X	VR-13	E-43	E-43 C	E-43X
1948–49	8 cyl.	AL-18	AL-23	AL-1823	AL-99	AL-106	ALC-111	UC-10	SS-100	E-17-18	E-17X	VR-13	E-43	E-43 C	E-43X
LAFAYETTE															
1934	6 Cyl. 113	AL-8	AL-9	AL-890	AL-93	AL-98	ALC-103	UC-1	SW-18	E-17-18	E-17X	GC-5	E-35	E-35C	E-35X
1935	3510	AL-8	AL-9	AL-890	AL-93	AL-98	ALC-103	UC-1	SW-18	E-17-18	E-17X	GC-7	E-35	E-35C	E-35X
1936	3610	AL-18	AL-9	AL-1890	AL-93	AL-98	ALC-103	LC-12	SW-1	E-17-18	E-17X	GC-7	E-35	E-35C	E-35X
NASH															
1931	6-60	AL-8	AL-9	AL-890	AL-77	AL-82	ALC-103	UC-1	SW-17	E-17-18	E-17X	GC-7	E-20	E-20C	E-20X
1931	8-70	AL-18	AL-9	AL-1890											
		AL-18	AL-13	AL-1813	AL-89	AL-92	ALC-108	UC-10	SW-17	E-17-18	E-17X	GC-7	E-20	E-20C	E-20X
1931	8-80, 8-90	AL-17(2)	AL-9(2)	AL-1790	AL-87	AL-90	ALC-115(2)	UC-10	SW-17	E-17-18	E-17X	GC-7	E-35	E-35C	E-35X
1931	9-60	AL-8	AL-9	AL-890	AL-77	AL-82	ALC-103	UC-10	SW-17	E-17-18	E-17X	GC-7	E-20	E-20C	E-20X
1931–32	9-70, 10-70	AL-18	AL-9	AL-1890											
		AL-18	AL-13	AL-1813	AL-89	AL-92	ALC-108	UC-10	SW-17	E-17-18	E-17X	GC-7	E-20	E-20C	E-20X
1931–32	9-80, 10-80	AL-17(2)	AL-9(2)	AL-1790	AL-87	AL-90	ALC-115(2)	UC-10	SW-17	E-17-18	E-17X	GC-7	E-35	E-35C	E-35X
1931–32	9-90, 10-90	AL-17(2)	AL-9(2)	AL-1790	AL-87	AL-90	ALC-115(2)	UC-10	SW-17	E-17-18	E-17X	GC-7	E-35	E-35C	E-35X
1932	10-60	AL-8	AL-9	AL-890	AL-77	AL-82	ALC-103	UC-10	SW-17	E-17-18	E-17X	GC-7	E-20	E-20C	E-20X
1933	6, 11-20	AL-8	AL-9	AL-890	AL-77	AL-82	ALC-103	UC-1	SW-18	E-17-18	E-17X	GC-5	E-35	E-35C	E-35X
1933	8, 11-30, 11-70	AL-17	AL-9	AL-1790											
		AL-17	AL-13	AL-1713	AL-79	AL-88	ALC-108	HSC-1	SW-18	E-17-18	E-17X	GC-5	E-35	E-35C	E-35X
1933	8, 11-80, 11-90	AL-17(2)	AL-9(2)	AL-1790	AL-87	AL-90	ALC-115(2)	HSC-1	SW-18	E-17-18	E-17X	GC-7	E-35	E-35C	E-35X
1934	6 Cyl.	AL-17(2)	AL-9(2)	AL-1790	AL-81	AL-100	ALC-115(2)	UC-10	.....	E-17-18	E-17X	GC-5	E-35	E-35C	E-35X
1934	8 Cyl.	AL-17(2)	AL-9(2)	AL-1790	AL-87	AL-90	ALC-115)2)	UC-10	.....	E-17-18	E-17X	GC-5	E-35	E-35C	E-35X
1935	1220-3520 Adv. 6	AL-17(2)	AL-9(2)	AL-1790	AL-81	AL-100	ALC-115(2)	HSC-1	.....	E-17-18	E-17X	GC-5	E-35	E-35C	E-35X
1935	1280-3580 Adv. 8	AL-17(2)	AL-9(2)	AL-1790	AL-87	AL-90	ALC-115(2)	HSC-1	.....	E-16-18	E-16X	GC-5	E-35	E-35C	E-35X
1936	3620, 6 Cyl.	AL-18(2)	AL-9(2)	AL-1890	AL-81	AL-100	ALC-115	HSC-1	.....	E-17-18	E-17X	VR-1	E-39	E-39C	E-39X
1936	3640, 3640A, 6 Cyl.	AL-18	AL-9	AL-1890	AL-93	AL-98	ALC-103	LC-16	SW-1	E-17-18	E-17X	GC-7	E-39	E-39C	E-39X
1936	3680, 8 Cyl.	AL-8(2)	AL-9(2)	AL-890	AL-87	AL-90	ALC-115	HSC-1	.....	E-17-18	E-17X	VR-11	E-39	E-39C	E-39X
1937–38	Ambass. 6, 3720, 3820	AL-18(2)	AL-9(2)	AL-1890	AL-81	AL-100	ALC-115	UC-10	SW-1	E-16-18	E-16X	VR-11	E-44M	E-44C	E-44X
1937–38	Ambass. 8, 3780, 3880	AL-8(2)	AL-9(2)	AL-890	AL-87	AL-90	ALC-115	HSC-1	.....	E-16-18	E-16X	VR-30	E-45	.....	E-45X
1937	Laf. 3710 (If Gen. GCM)	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-103	UC-1	SW-1	E-16-18	E-16X	GC-7	E-43	E-43C	E-43X
	(If Gen. GCO)	AL-20	AL-9	AL-2030	AL-93	AL-98	ALC-103	UC-1	SW-1	E-16-18	E-16X	VR-30	E-45	.....	E-45X
1938	Laf. 3810—														
	(If Gen. GCM, Dist. 4276)	AL-18	AL-9	AL-1890	AL-73	AL-76	ALC-115	UC-3	SW-1	E-16-18	E-16X	GC-7	E-43	E-43C	E-43X
	(If Gen. GCO, Dist. 4415)	AL-18	AL-9	AL-1890	.....	.....	ALC-115	UC-3	SW-1	E-16-18	E-16X	VR-30	E-45	.....	E-45X
1939	Ambass. 3920, 6 Cyl.	AL-18(2)	AL-9(2)	AL-1890	AL-81	AL-100	ALC-115	HSC-1	.....	E-16-18	E-16X	VR-11	E-44M	E-44C	E-44X
1939	Ambass. 3980, 8 Cyl.	AL-18(2)	AL-9(2)	AL-1890	AL-87	AL-90	ALC-115	HSC-1	.....	E-16-18	E-16X	VR-11	E-44M	E-44C	E-44X
1939–40	Laf. 3910														
	(If Gen. GCO, GDZ, Dist. 4104)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	UC-3	SW-1	E-16-18	E-16X	VR-30	E-45	.....	E-45X
	(If Gen. GDS, Dist. 4104)	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	UC-3	SW-1	E-16-18	E-16X	VR-11	E-43	E-43C	E-43X

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

REPLACEMENT IGNITION PARTS FOR AUTO-LITE AND FORD

	DESCRIPTION	IGNITION DISTRIBUTOR PARTS							STARTER PARTS	GENERATOR PARTS				
Year	Model	Arm	Bar or Screw	Contact Set No.	Rotor	Cap	Condenser	COIL	Starter Switch	Motor Brush (4)	Motor Brush Set No.	Cut-out or Req.	Gen. Brush (2)	Control Brush	Gen. Brush Set No.
NASH (Cont.)															
1940	4020, 6 Cyl.	AL-18(2)	AL-9(2)	AL-1890	AL-81	AL-100	ALC-115	UC-10	SW-1	E-16-18	E-16X	VR-34	E-45	.....	E-45X
1940-41	4080, 4180. 8 Cyl.	AL-18(2)	AL-9(2)	AL-1890	AL-87	AL-90	ALC-115 ALC-115	HSC 1	SW-1	E-16-18	E-16X	VR-34	E-45	.....	E-45X
1941	4140, 6 Cyl.	DR-18	DR-21	DR-1821	DR-81	DR-106	UC-105 ALC-115	LC-10	.....	R-37	R-37X	VR-34	R-51	.....	R-51X
1941	4160, 6 Cyl.	AL-18(2)	AL-9(2)	AL-1890	AL-81	AL-84	ALC-115	UC-10	.....	E-16-18	E-16X	VR-34	E-45	.....	E-45X
1942	4240, 6 Cyl.	DR-18	DR-21	DR-1821	DR-81	DR-106	ALC-115 UC-105	UC-10 LC-10	.....	R-52	R-52X	VR-33	R-51	.....	R-51X
1942	4260, 6 Cyl.	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	.....	E-17-18	E-17X	VR-30	E-45	.....	E-45X
1942	4280, 8 Cyl.	AL-18	AL-23	AL-1823	AL-99	AL-106	ALC-111	LC-16	.....	E-17-18	E-17X	VR-30	E-45	.....	E-45X
1948	6 Cyl. "Amb'r."	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	UC-1	.....	E-17-18	E-17X	VR-30	E-45	.....	E-45X
1948	6 Cyl. "600"	AL-18	AL-25	AL-1825	AL-97	AL-104	ALC-115	UC-1	.....	E-17-18	E-17X	VR-30	E-45	.....	E-45X
1948-49	4840 "600"	DR-18	DR-24	DR-1824	DR-85	DR-90	UC-104	UC-1	.....	R-52	R-52X	VR-30	R-51	.....	R-51X
1948-49	4860 "Amb'r."	DR-18	DR-30I	DR-1830L	DR-85	DR-90	UC-104	UC-1	.....	R-37	R-37X	VR-30	R-51	.....	R-51X
PACKARD															
1935	120	AL-19	AL-9	AL-1990											
		AL-19	AL-13	AL-1913	AL-99	AL-106	ALC-108	LC-16H	SS-100	E-37-38	E-37X	VR-1	E-39	E-39C	E-39X
1936	120B	AL-18	AL-9	AL-1890											
		AL-18	AL-13	AL-1813	AL-99	AL-106	ALC-108	LC-19H	SS-100	E-37-38	E-37X	VR-1	E-39	E-39C	E-39 X
1937	1506, 7, 8, 12 Cyl.	AL-18	AL-9	AL-1890			ALC-114								
		AL-18	AL-13L	AL-1813L	AL-95	AL-102	ALC-115	LC-22H	SS-100	D-112	D-112X	VR-30	R-47	.....	R-47X
1937-38	120C, 1601, 2, 3, 4, 5	AL-18	AL-9	AL-1890	AL-99	AL-106	ALC-114	LC-19H	SS-100	E-37-38	E-37X	VR-11	E-43	E-43C	E-43X
1938	1606, 7, 8, 12 Cyl.	AL-18(2)	AL-9(2)	AL-1890	AL-95	AL-102	ALC-115	LC-21H	SS-100	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1939	1700, 6 Cyl.—														
	If Dist. IGS-4013	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-19H	SS-100	E-37-38	E-37X	VR-11	E-43	E-43C	E-43X
	If Dist. IGS-4201	AL-18	AL-27	AL-1827	AL-97	AL-104	ALC-114	LC-19H	SS-100	E-37-38	E-37X	VR-11	E-43	E-43C	E-43X
1939	1701, 1702, 8 Cyl.	AL-18	AL-9	AL-1890	AL-99	AL-106	ALC-115	LC-19H	SS-100	E-37-38	E-37X	VR-11	E-43	E-43C	E-43X
1939	1703, 4, 5, Super 8—														
	(If Gen. GCO-4803A)	AL-18	AL-9	AL-1890	AL-99	.....	ALC-115	LC-19H	.....	D-73-73L	D-73X	VR-30	E-45	.....	E-45X
	(If Gen. GCO-4807A)	AL-18	AL-9	AL-1890	AL-99	.....	ALC-115	LC-19H	.....	D-73-73L	D-73X	VR-11	E-43	E-43C	E-43X
1939	1706, 7, 8, 12 Cyl.	AL-18	AL-9	AL-1890			ALC-114								
		AL-18	AL-13L	AL-1813L	AL-95	AL-102	ALC-115	LC-22H	SS-100	D-73-73L	D-73X	VR-30	E-46	.....	E-46X
1940	1800, 6 Cyl.	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-103	LC-19H	SS-100	E-16-18	E-16X	VR-34	E-45	.....	E-45X
1940	1801, 1802, 8 Cyl.	AL-18	AL-29	AL-1829	AL-99	AL-106	ALC-115	LC-19H	SS-100	E-37-38	E-37X	VR-34	E-45	.....	E-45X
1940	1803, 1804. 1805B, 8 Cyl.	AL-18	AL-23L	AL-1823L	AL-99	AL-106	ALC-114	LC-25H	.....	E-37-38	E-37X	VR-32	E-45	E-43C	E-45CX
1941-42	1901, 8 Cyl.	AL-18	AL-29	AL-1829	AL-99	AL-106	ALC-115	LC-19H	.....	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1941-42	1903 2001 4, 5, 8 Cyl 2003	AL-18	AL-23L	AL-1823L	AL-99	AL-106	ALC-112	LC-25H	.....	E-37-38	E-37X	VR 30	E-45	.....	E-45X
1948	6 Cyl. (AL)	AL-18	AL-25	AL-1825	AL-97	AL-104	ALC-115	UC-1	.....	E-37-38	E-37X	VR-34	E-45	.....	E-45X
1948-49	8 Cyl. 2201, 2, (AL)	AL-18	AL-29	AL-1829	AL-99	AL-106	ALC-115	UC-10	.....	E-37-38	E-37X	VR-34	E-45	.....	E-45X
1948-49	8 Cyl. 2206, 26, 33	AL-18	AL-27	AL-1827	AL-99	AL-106	ALC-114	UC-10	.....	E-37-38	E-37X	VR-34	E-46	.....	E-46X
1949	6 Cyl. 2220, 40, 80														
	86	AL-18	AL-25	AL-1825	AL-97	AL-104	ALC-115	UC-10	.....	E-37-38	E-37X	.....	.....	.....	.....
PLYMOUTH															
1935-36	6-PJ, PI	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16	SW-51	E-37-38	E-37X	GC-7	E-39	E-39C	E-39X
1936	P2	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16	SW-51	E-37-38	E-37X	GC-7	E-39	E-39C	E-39X
1937-38	P3, P5—If Gen. GBM	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16	SW-51	E-37-38	E-37X	GC-7	E-39	E-39C	E-39X
	If Gen. GCB	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16	SW-51	E-37-38	E-37X	VR-30	E-46	.....	E-46X
	If Gen. GDA	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16	SW-51	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1937-38	P4, P6 If Gen. GCJ, GDF	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16	SW-51	E-37-38	E-37X	VR-11	E-43	E-43C	E-43X
	If Gen. GBW, GDA	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16	SW-51	E-37-38	E-37X	VR-30	E-45	.....	E-45X
	If Gen. GCB	AL-18	AL-9	AL-1890	AL-97	AL-104	ALC-114	LC-16	SW-51	E-37-38	E-37X	VR-30	E-46	.....	E-46X
1939	P-7, 6 Cyl.	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-16-18	E-16X	GC-7	E-39	E-39C	E-39X
1939	P-7 (Can. only), 6 Cyl.	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	GC-7	E-39	E-39C	E-39X
1939	P-8, 6 Cyl.	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-16-18	E-16X	VR-11	E-43	E-43C	E-43X
1939	P-8 (Can. only), 6 Cyl.	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-11	E-43	E-43C	E-43X
1940-41	P9, 10, 11, 12—														
	If Gen. GDZ	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-16-18	E-16X	VR-34	E-45	.....	E-45X
	If Gen. GEB, GEG	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-16-18	E-16X	VR-34	E-46	.....	E-46X
1940-41	P9, 10, 11, 12 (Canada)—														
	If Gen. GDZ	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-34	E-45	.....	E-45X
	If Gen. GEB	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-52	E-37-38	E-37X	VR-34	E-46	.....	E-46X
1942	P-14	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	LC-16	SW-51	E-16-18	E-16X	VR-30	E-45	.....	E-45X
1948	All Models	AL-18	AL-21	AL-1821	AL-97	AL-104	ALC-114	UC-1	SS-300	E-16-18	E-16X	VR-30	E-45	.....	E-45X
1949	All Models	AL-18	AL-21	AL-1821	AL-97	AL-112	ALC-114	UC-1	SS-300	E-17-18	OE-18TX	.....	E-45	.....	E-45X
STUDEBAKER															
1937	5A, 6A Dict. 6	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-103	LC-18H	SW-51	E-37-38	E-37X	VR-1	E-44M	E-44C	E-44X
1938	7A, Dict. 6 Cyl.	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-103	UC-1	.....	E-37-38	E-37X	.....	E-43	E-43C	E-43X
1938-39	8A, 9A Com., 6 Cyl.	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-103	.....	.....	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1939	7A Dict., 6 Cyl.	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-103	.....	.....	E-37-38	E-37X	.....	E-43	E-43C	E-43X
	If Gen. GDA	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-103	LC-12	.....	E-16-18	E-16X	VR-34	E-45	.....	E-45X
	If Gen. GEB	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-103	LC-12	.....	E-16-18	E-16X	VR-34	E-46	.....	E-46X
1940	10A Commander	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-103	LC-16H	.....	E-37-38	E-37X	VR-34	E-45	.....	E-45X
1941	Pres. 8	AL-18	AL-13	AL-1813											
		AL-18	AL-9	AL-1890	AL-89	AL-92	ALC-108	LC-16H	.....	E-37-38	E-37X	VR-34	E-45	.....	E-45X
1941	3G Champion, 6 Cyl.	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-103	LC-12	.....	E-16-18	E-16X	VR-34	E-45	.....	E-45X
1941	11A Commander, 6 Cyl.	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-103	LC-16	.....	E-37-38	E-37X	VR-34	E-45	.....	E-45X
1942	4G (Dist. IGW)	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-103	.....	.....	E-16-18	E-16X	VR-30	E-45	.....	E-45X
1942	4G (Dist. IGC)	AL-18	AL-25	AL-1825	AL-97	AL-104	ALC-115	.....	.....	E-16-18	E-16X	VR-30	E-45	.....	E-45X
1942	12A (Dist. IGW)	AL-20	AL-9	AL-2090	AL-93	AL-98	ALC-103	LC-16	.....	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1942	12A (Dist. IGC), 6	AL-18	AL-25	AL-1825	AL-97	AL-104	ALC-115	LC-16	.....	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1942	8 Cyl.	AL-18(2)	AL-9	AL-1890											
			AL-13	AL-1813	AL-89	AL-92	ALC-108	LC-16	.....	E-37-38	E-37X	VR-30	E-45	.....	E 45X
1948-49	14A, 15A	AL-18	AL-25	AL-1825	AL-97	AL-104	ALC-115	UC-1	.....	E-37-38	E-37X	VR-30	E-45	.....	E-45X
1948-49	6G, 7G	AL-18	AL-25	AL-1825	AL-97	AL-104	ALC-115	UC-1	.....	E-16-18	E-16X	VR-30	E-45	.....	E-45X
WHIPPET-WILLYS															
1930-32	880, 880D, 888, 888A, 8 Cyl.	AL-17	AL-9	AL-1790											
		AL-17	AL-13	AL-1713	AL-79	AL-88	ALC-108	LC-3H	.....	E-17-18	E-17X	GC-7	E-20	E-20C	E-20X
1932	690, 690A	AL-8	AL-9	AL-890	AL-77	AL-82	ALC-103	LC-3	.....	E-16-18	E-16X	GC-5	E-20	E-20C	E-20X
1933-35	77, 4 Cyl.	AL-8	AL-9	AL-890	AL-77	AL-80	ALC-103	UC-1	SW-1	E-16-18	E-16X	GC-5	E-20M	E-20C	E-20MX
1936	77, 4 Cyl.	AL-18	AL-9	AL-1890	AL-101	AL-74	ALC-115	UC-1	SW-1	E-16-18	E-16X	GC-5	E-20M	E-20C	E-20MX
1937	95, 4 Cyl.	AL-8	AL-9	AL-890	AL-101	AL-74	ALC-115	UC-1	SS-100	E-17-18	E-17X	GC-8	E-20M	E-20C	E-20MX
1938	4 Cyl.	AL-18	AL-9	AL-1890	AL-101	AL-74	ALC-113	UC-1	SS-100	E-16-18	E-16X	GC-8	E-20	E-20C	E-20X
1939	48, 4 Cyl. (If Dist. IGS)	AL-18	AL-9	AL-1890	AL-101	AL-74	ALC-115	UC-1	SS-100	E-16-18	E-16X	GC-7	E-20M	E-20C	E-20MX
	(If Dist. IGW)	AL-20	AL-9	AL-2090	AL-93	AL-110	ALC-103	UC-1	SS-100	E-16-18	E-16X	GC-7	E-20M	E-20C	E-20MX
1940-42	440, 441' 42	AL-20	AL-9	AL-2090	AL-93	AL-110	ALC-103	UC-1	SW-34	E-16-18	E-16X	VR-12	E-43	E-43C	E-43X

D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

REPLACEMENT IGNITION PARTS FOR AUTO-LITE AND FORD

Part Number	List Price
AL-2 Screw	.50
AL-7 Arm	.85
AL-9 Screw	.45
AL-11	.85
AL-13 Bar	.45
AL-13L Bar	.45
AL-16 Arm	.85
AL-17 Arm	.90
AL-18 Arm	.90
AL-18H Hy. Duty Arm	1.10
AL-19 Arm	.90
AL-20 Arm	.90
AL-21 Bar	.45
AL-21H Hy. Duty Bar	.55
AL-22 Arm	.90
AL-23 Bar	.45
AL-23L Bar	.45
AL-25 Bar	.45
AL-27 Bar	.50
AL-29 Bar	.50
AL-67 Brush	.25
AL-70	3.00
AL-74 Cap	3.10
AL-76 Cap	3.50
AL-77 Rotor	.50
AL-79 Rotor	.60
AL-80 Cap	1.65
AL-82 Cap	1.75
AL-84 Cap	6.60
AL-87 Rotor	1.60
AL-88 Cap	3.60
AL-89 Rotor	1.60
AL-90 Cap	7.60
AL-91 Rotor	1.60
AL-92 Cap	4.20
AL-93 Rotor	.50
AL-95 Rotor	1.65
AL-97 Rotor	.60
AL-98 Cap	1.75
AL-99 Rotor	.60
AL-100 Cap	6.60
AL-101 Rotor	.60
AL-102 Cap	8.25
AL-103 Rotor	.60
AL-104 Cap	2.50
AL-105 Rotor	.60
AL-106 Cap	2.75
AL-108 Cap	2.75
AL-110 Cap	1.95
AL-112 Cap	3.25
AL-114 Cap	4.35
AL-720 Contact Set	1.35
AL-890 Contact Set	1.35
AL-1120 Contact Set	1.35
Al-1190 Contact Set	1.30
AL-1690 Contact Set	1.30
AL-1713 Contact Set	2.70
AL-1713L Contact Set	2.70
AL-1790 Contact Set	1.35
AL-1813 Contact Set	2.70
AL-1821 Contact Set	1.35
AL-1821H Hy. Duty Set	1.65
AL-1823 Hy. Duty Set	1.35
AL-1823L Contact Set	1.35
AL-1825 Contact Set	1.35
AL-1827 Contact Set	1.40

Part Number	List Price
AL-1829 Contact Set	1.40
AL-1890 Contact Set	1.35
AL-1913 Contact Set	2.70
AL-1990 Contact Set	1.35
AL-2090 Contact Set	1.35
AL-2290 Contact Set	1.35
ALC-103 Condenser	1.35
ALC-106 Condenser	1.60
ALC-108 Condenser	1.35
ALC-110 Condenser	1.60
ALC-111 Condenser	1.10
ALC-112 Condenser	1.10
ALC-113 Condenser	1.10
ALC-114 Condenser	1.00
ALC-115 Condenser	1.00
E-10 Motor Brush	.45
E-13 Gen. Brush	.40
E-13C Control Brush	.25
E-14 Motor Brush	.25
E-16 Motor Brush	.45
E-17 Motor Brush	.45
E-18 Motor Brush	.45
E-18T Motor Brush	.45
E-19 Gen. Brush	.45
E-19C Gen. Brush	.45
E-20 Gen. Brush	.19
E-20C Control Brush	.16
E-20M Gen. Brush	.19
E-32 Gen. Brush	.24
E-32C Control Brush	.22
E-33 Motor Brush	.45
E-34 Motor Brush	.45
E-35 Gen. Brush	.45
E-35C Control Brush	.45
E-36 Gen. Brush	.65
E-36C Control Brush	.65
E-37 Motor Brush	.35
E-38 Motor Brush	.35
E-39 Gen. Brush	.45
E-39C Control Brush	.35
E-43 Gen. Brush	.45
E-43C Control Brush	.45
E-44C Control Brush	.45
E-44M Gen. Brush	.45
E-45 Gen. Brush	.45
E-46 Gen. Brush	.45
E-46C Control Brush	.45
E-47 Gen. Brush	.75
E-47M Gen. Brush	.75
E-48 Gen. Brush	.95
F-1 Motor Brush	.38
F-2 Gen. Brush	.27
F-2C Control Brush	.27
F-4 Gen. Brush	.20
F-4C Control Brush	.20
F-5 Motor Brush	.28
F-5S Motor Brush	.28
F-5T Motor Brush	.28
F-6 Motor Brush	.28
F-7 Gen. Brush	.20
F-7C Control Brush	.20
F-8 Gen. Brush	.10
F-8C Control Brush	.10
F-9 Gen. Brush	.10

Part Number	List Price
F-9C Control Brush	.10
F-13 Gen. Brush	.25
F-14 Gen. Brush	.25
F-15 Motor Brush	.60
F-16 Motor Brush	.60
F-17 Gen Brush	.77
FC-6 Coil	8.00
FC-7 Coil	8.00
FC-8 Coil	8.75
FC-9 Coil	7.75
FC-10 Coil	7.50
FC-10H Coil	9.90
FO-3 Bridge)	
FO-4 Spring)	.45
FO-5 Arm	.45
FO-6 Screw	.15
FO-7 Arm	.50
FO-8 Arm	1.20
FO-9 Screw	.15
FO-10 Arm	1.20
FO-11 Screw	.15
FO-12 Arm	.55
FO-13R Bar	.40
FO-13L Bar	.40
FO-14R Bar	.55
FO-14L Bar	.55
FO-15 Contacts	1.55
FO-15H Contacts	2.00
FO-50 Gasket	.10
FO-51 Gasket	.10
FO-52 Brush	.15
FO-53 Connector	.05
FO-54 Plate	1.65
FO-54P Plate	.80
FO-55 Plate	.44
FO-57 Plate Comp.	2.50
FO-57P Plate Only	.80
FO-58 Bkr. Plate	2.75
FO-58P Plate Only	.80
FO-59 Coil Gasket	.15
FO-60 Coil Gasket	.15
FO-61 Brush	.15
FO-62 Strip	.45
FO-63 Bkt.	.33
FO-70 Body	1.40
FO-70A Cover	.45
FO-71 Rotor	.30
FO-73 Rotor	.90
FO-74 Body	1.15
FO-74A Cover	.45
FO-75 Rotor	.85
FO-76 Body	.80
FO-77 Rotor	.50
FO-78 Cap	2.85
FO-79 Rotor	.45
FO-80 Cap	4.50
FO-80A Cap	1.50
FO-81 Rotor	.50
FO-83 Rotor	.50
FO-85 Rotor	.80
FO-86 Cap	2.45
FO-88 Cap	4.75
FO-560 Contact Set	.60
FO-760 Contact Set	.65
FO-890 Contact Set	1.80

Part Number	List Price
FO-1011 Contact	1.80
FO-1213R Contact Set	.95
FO-1213L Contact Set	.95
FO-1214R Contact Set	1.10
FO-1214L Contact Set	1.10
FOC-100 Condenser	.65
FOC-101 Condenser	.70
FOC-102 Condenser	.80
FOC-103 Condenser	.80
FOC-104 Condenser	.80
FOC-105 Condenser	.80
FOC-106 Condenser	.80
FOC-107 Condenser	.80
FOC-108 Condenser	.80
FOC-109 Condenser	.75
FOC-110 Condenser	.75
FOC-110H Condenser	.90
GC-1 Cutout	1.75
GC-2 Cutout	1.80
GC-2X Cutout	2.65
GC-3 Cutout	1.80
GC-5 Cutout	1.80
GC-5X Cutout	2.65
GC-7 Cutout	2.20
GC-8 Cutout	2.20
GC-10 Cutout	2.20
LC-1H Coil	7.95
LC-2H Coil	7.95
LC-3H Coil	7.95
LC-4H Coil	7.95
LC-5H Coil	7.95
LC-6 Coil	7.00
LC-6H Coil	7.95
LC-7H Coil	10.25
LC-10 Coil	6.50
LC-10H Coil	7.95
LC-12 Coil	7.00
LC-12H Coil	7.95
LC-13H Coil	7.95
LC-14H Coil	7.95
LC-16 Coil	6.50
LC-16H Coil	7.95
LC-17H Coil	7.95
LC-19H Coil	7.95
LC-20 Coil	7.00
LC-20H Coil	7.95
LC-21H Coil	7.95
LC-23H Coil	7.95
LC-24H Coil	7.95
LC-25H Coil	7.95
LC-26H Coil	9.00
VR-1 Volt. Reg.	8.80
VR-4 Volt. Reg.	8.80
VR-11 Volt. Reg.	8.80
VR-12 Volt. Reg.	8.80
VR-13 Volt. Reg.	8.80
VR-14 Volt. Reg.	8.80
VR-30 Volt. Reg.	12.00
VR-31 Volt. Reg.	11.25
VR-32 Volt. Reg.	12.00
VR-33 Volt. Reg.	12.00
VR-34 Volt. Reg.	12.00
VR-35 Volt. Reg.	12.00
VR-36 Volt. Reg.	12.00

Solenoid Switch Conversion Assembly

List Price: $4.95



This conversion unit is designed to meet the requirements for converting push button starting to the more advantageous method of solenoid switch starting.

This assembly consists of the highest grade solenoid switch, specially designed with adaptor bracket, one push button switch, one mounting bracket and six feet of connecting cable with special terminal.

This conversion kit can be used on all Chevrolet cars including 1937 and all automobiles equipped with Bendix spring starter drive as well as many trucks, stationary engines and marine engines.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

Original Equipment Guide Headlamps

Universal Headlamps

Sealed Beam Type

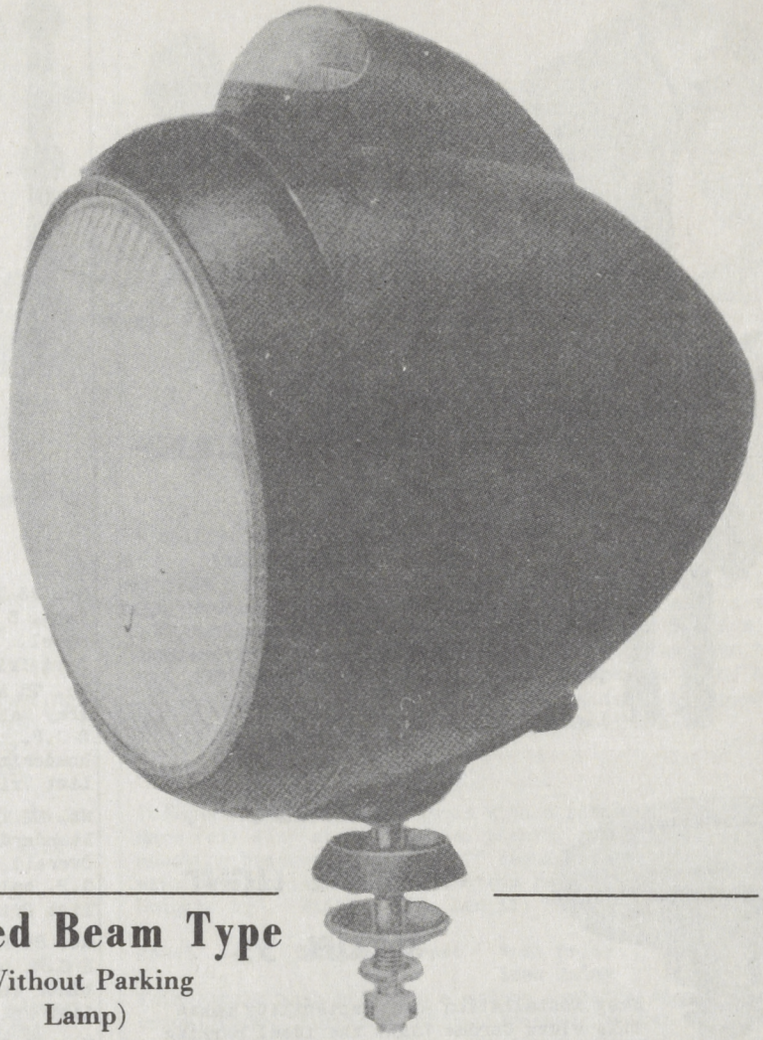
(With Parking Lamp)

The headlamp illustrated at the right contains the Guide Sealed Beam unit described on page 1. It provides a complete replacement for old type or worn out headlamps on cars, trucks, buses and other vehicles. Legally approved in all States where approval is required.

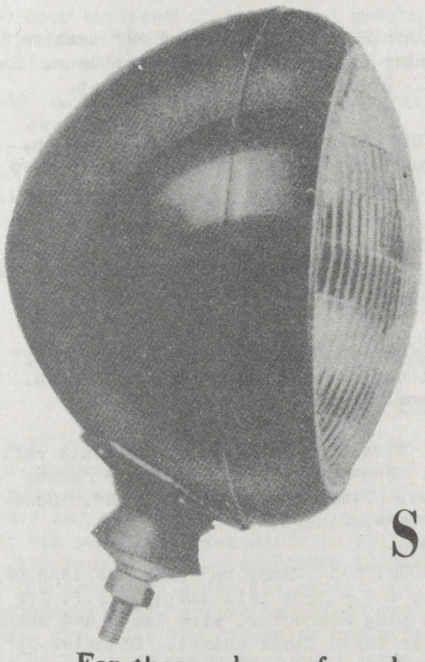
Specially designed adapters and extra long bolt permit installation on all types of ball and socket mountings or standard SAE mountings. Body is constructed to permit rotation of Sealed Beam unit for horizontal mounting.

A complete parking light is a part of each headlamp as shown.

Finished in black baked enamel. (Will be supplied with chrome door as soon as restrictions are lifted.) Packed in pairs (two lamps to a carton) complete with Guide Sealed Beam units, parking light bulbs, and necessary adapters for installation.



Part No.	Ship'g Wt. Per Pair	List Price
682-C	11 lbs.	$11.25 Ea.



Sealed Beam Type

(Without Parking Lamp)

An ideal replacement headlamp having all features of No. 682-C (above), except parking lamp. In addition, it is 3 5/64" shorter overall, a distinct advantage when mounting in close quarters. Finished in black baked enamel. (Will be supplied with chrome door as soon as restrictions are lifted.) Packed in pairs, two lamps to a carton, complete with Guide Sealed Beam units and necessary adapters for installation.

Part No.	Ship'g Wt. Per Pair	List Price
903-09	9 Lbs.	$11.30 Ea.

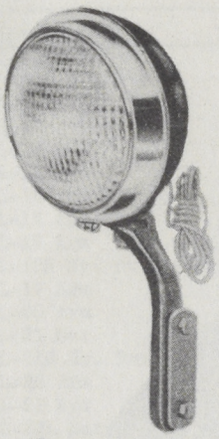
Separable Reflector Type

(Not Illustrated)

For those who prefer a headlamp with separate reflector, lens and bulb, we recommend Guide No. 828-R. Universal mounting is provided, same as lamps shown above. Has parking bulb in reflector and Tilt-Ray lens—approved in all States where approval is required. Finished in black baked enamel. (Will be supplied with chrome door as soon as restrictions are lifted.) Packed in pairs (2 lamps to a carton), complete with universal adapters.

Part No.	Ship'g Wt. Per Pair	List Price
828-R	11 Lbs.	$7.25 ea.

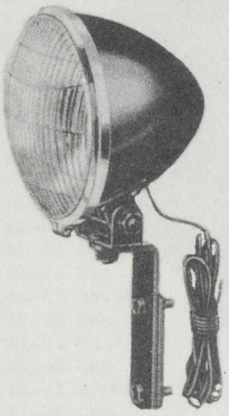
AUTOMOTIVE ACCESSORIES



SEALED BEAM

TRACTOR LAMP

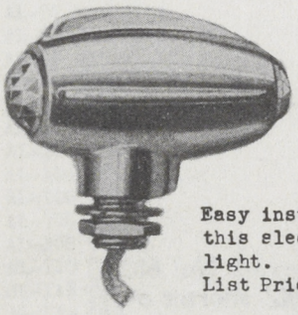
No. 525
WITH HEAVY STAMPED BRACKET THAT CAN BE CLAMPED ON OR BOLTED TO TRACTOR.
Steel body and bracket black enamelled. Stainless steel door. Sturdily constructed for Tractor use. Bracket adjustable for right or left side. Light can be focused up or down and sideways on the ball mounting.
Can also be supplied in 12 Volts when specified.
List Price each. $5.75



DO-RAY

5 Inch TRACTOR LAMP

No. 510
WITH HEAVY STAMPED BRACKET
Strongly built for Tractors. 32 C.P. fixed focus beam throws a powerful beam of light Made of heavy gauge metal throughout. Stainless steel door. 5 feet of weatherproof wire.
List Price each. $5.25



TORPEDO

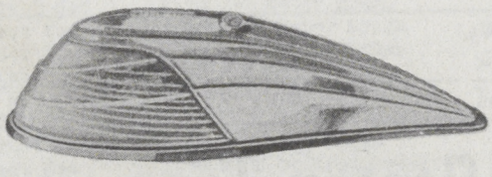
PARKING LIGHT

MODEL 55

Easy installation and adaptability makes this sleek Chrome Light the ideal parking light.
List Price per pair. $2.85

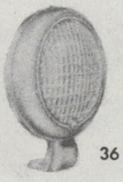
CAB FENDER and CLEARANCE LIGHT

FITS FENDERS, CABS AND BODIES



CAN BE USED AS PARKING LIGHT WITH WHITE OR CLEAR LENS. LENS FURNISHED IN RED, AMBER, WHITE, GREEN OR CLEAR. Furnished with rubber pad to flo-fit to any contour. Furnished with bolts, nuts and lock nuts for complete installation. 3 C.P. bulb. Length 8¼", width 2½", height 2½".
List Price each. $2.15

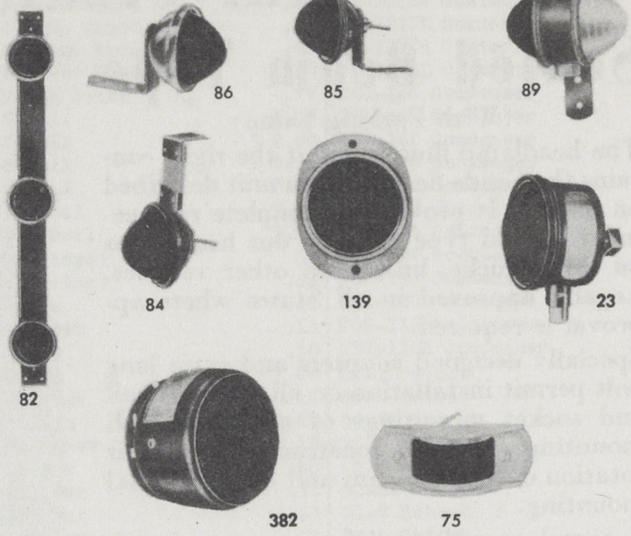
BACK UP LIGHTS



36

No. 36 BACK UP LIGHT. Shallow back for pebble guard mounting 21 C.P. bulb. 12 feet of wire furnished.
List Price each. $5.50

WARNING LIGHTS FOR ALL PURPOSES



No. 23 TAIL LAMP. Single bolt mounting. 3" ruby semaphore lens. 3 C.P. bulb. Finished in black enamel on bonderized steel.
List Price each. $1.50

No. 75 ARMORED CLEARANCE LIGHT. All steel construction with gray baked finish. Available with red, amber or green lens. 2 C.P. bulb. length 5¼" height 1 7/16". All steel parts bonderized.
List Price each. $1.95

No. 82 THREE-IN-LINE IDENTIFICATION LIGHT. Concealed wiring. Standard 2½" beehive lens furnished in red, amber and green. Overall length 22 9/32" with 8¼" spacing between lamps. 3 C.P. bulb. Black enamel finish.
List Price each. $3.05

No. 84 FLEXIBLE CLEARANCE LIGHT. Standard 2½" beehive lens. 3 C.P. bulb. Red, amber, green, blue and white lens. Baked black enamel finish. Braided copper ground strap.
List Price each. $1.10

No. 85 CLEARANCE LIGHT Removable bracket 2½" beehive. Red, amber, green, blue and white lens. 3 C.P. bulb. Baked black enamel finish.
List Price each. $1.15

No. 86 CLEARANCE LIGHT Rigid type. 2½" beehive. Baked black enamel finish. 3 C.P. bulb. Lens, red, amber, green, blue and white.
List Price each. .65

No. 89 DOUBLE FACED CLEARANCE LAMP. Side mounting 2½" beehive, Lens combinations, red and amber, red and green. 3 C.P. bulb. Black enamel finish.
List Price each. $1.55

No. 139 REFLECTOR. Flexible. 3" approved plastic reflex lens. Red or amber. Heavy reinforced flexible rubber mounting. Oval Shape. Dimensions 4 1/2x3 9/16". Bonderized steel, grey enamel finish.
List Price each. $1.00

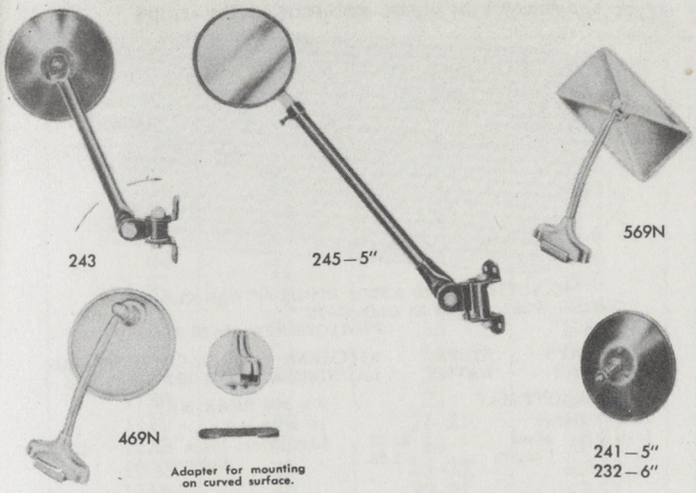
No. 382 UNIVERSAL MOUNTING. "Snap on" doorless lens unit. Double filament bulb, 3 C.P. for tail lamp, 21 C.P. for stoplite. Complete with plug connector, wire leads and mounting hardware. Finished in baked black enamel. Diameter 3½". Replacement lens No. 256.
List Price each. $3.35

GET IT FROM YOUR JOBBER TRADE MARK

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

AUTOMOTIVE ACCESSORIES

MIRRORS
FOR PASSENGER CARS and TRUCKS



No. 241 REPLACEMENT MIRROR HEAD 5" Universal ball type head. Baked black enamel finish. For 6" diameter mirror head specify No. 232.

List Price each. No. 241 5" Head. $1.10
List Price each. No. 232 6" Head. 1.60

No. 243 TRUCK MIRROR. For Panel trucks, light delivery, etc. Overall length 12 5/8" with 5" adjustable head. Body mounting bracket. Baked black enamel finish.
List Price each. $3.10

No. 245 TRUCK MIRRORS. Telescopic. Body on hinge mounting. Clamps on all hinges 1¾ to 3". Will fit all late Dodge trucks. 5" Mirror head. Extended length from 19¼" to 27⅜". Extension arm cadmium plated. Finished in baked black enamel. Bonderized.
List Price each. $4.25

No. 469 SIDE VIEW MIRROR. 4" non-glare round mirror with offset swivel head. New streamlined clamp-on base. Special molded rubber adapter furnished for mounting on curved door surfaces of late model passenger cars. Heavily chrome plated. Can be furnished in clear glass.
list price each. $3.70

No. 569 OBLONG SIDE-VUE MIRROR. Non-glare 3" x 5¼" mirror head. New streamlined clamp-on bracket. Special molded rubber adapter furnished for mounting on curved door surfaces of late model passenger cars. Heavily chrome plated. Available in clear glass.
List price each. $4.30

POLAVISION
REAR VIEW MIRROR
IT'S POLARIZED

ALWAYS IN FOCUS! SPARTON POLAVISION Rear View Mirrors are always in focus--matching the conditions of the human eye. Set it to give the best view of traffic in the rear and leave it there day and night. A driver having a SPARTON POLAVISION Mirror can pass from deep shade to brilliantly lighted open stretches knowing that his SPARTON POLAVISION Mirror will serve him perfectly under all conditions. Brilliant reds, disturbing yellows, whites and blues are toned by POLA-VISION. The usual eye strain is not experienced.

Inside Mirror Models and cars they fit. List Price Ea. $3.75

No. IP-1 (Long Stud)

Buick	1939-49	Nash	1939-49
Cadillac	1939-49	Oldsmobile	1939-49
Chevrolet	1939-49	Packard	1940-49
Chrysler	1939-49	Plymouth	1940-49
De Soto	1940-49	Pontiac	1939-49
Dodge	1940-49	Ford	1949

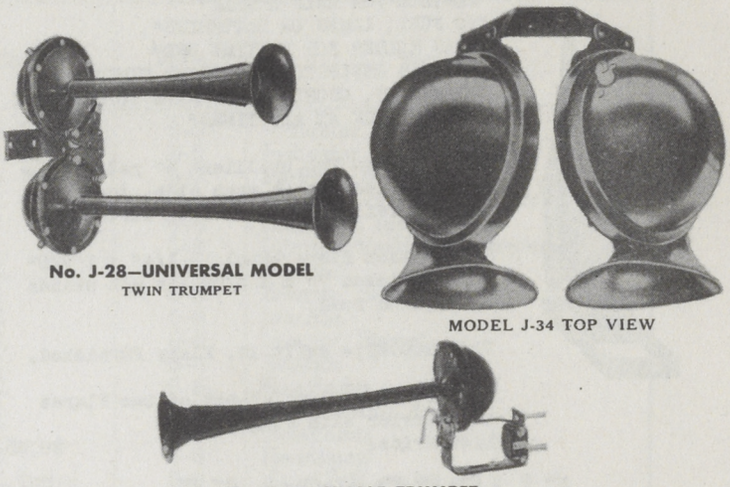
No. IP-2 (Short Stud) List Price Ea. $3.75

Mercury-Ford	1938-48	Hudson	1939-49

No. IP-3 (Universal List Price Ea. $3.35

Fits all cars. Will snap over your old mirror. Held securely with two springs.

SPARTON
Warning Signals



			List Price
Model J-34	Air Shell	6 Volt.	$14.50

The New Sparton Air Shell Horn with Twin Die Cast Projectors. Can be installed in three different positions and in either position only requires space of 6¾" high x 9½" wide x 6¾" deep. In many instances it could be mounted between radiator and grille. Furnished complete with brackets, relay and necessary bolts, washers etc. for installation. Equipped with outside terminals. Lustrous Jade Green finish.

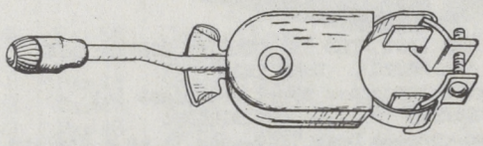
			List Price
Model J-28	Universal Model TWIN TRUMPET		$13.15

Top-quality replacement horns with a pleasing warning signal. Have full size standard power plants, relay and universal mounting bracket. Operate off regular horn button. Equipped with outside terminals. Lustrous Jade Green finish.
Height: 5¾". Width: 11". Length: 20½".

			List Price
Model J-17	Single Trumpet	with relay	$7.40
		less relay	6.45

This single horn provides a modern emphatic signal in economical form. Furnished with universal bracket and with or without relay as specified. Equipped with outside terminals. Lustrous Jade Green finish.
Height: 7½". Width: 5 1/8". Length: 20½".

SIGNAL-STAT "SIGFLARE"
No. 800R-6 (6 volt)

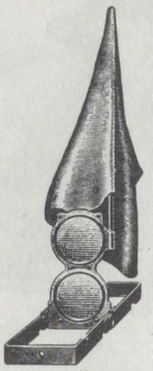


COMPLETE WITH EVERYTHING NECESSARY TO INSTALL.
List Price $12.95

The wiring feature of the SIGFLARE No. 800-R6 (6 volt) Signal Switch permits conversion of both the stoplights and the parking lights into Directional Signals.
It is especially valuable in converting Parking Lights, for by changing the size of the bulbs only (maintaining single contact bulbs) the original wires and weather seal at the rear of the lamp can be retained.
The SIGNAL-STAT "SIGFLARE" Directional Switch was designed to increase HIGHWAY and TRAFFIC SAFETY.
The Pilot Lever is the lever used for signalling the turns.
The Wing Lever is the lever used for Flashing all four signals at one time so that you can give a warning to all traffic that you car is disabled.
The SIGNAL-STAT "SIGFLARE" is so easy to install, no expert wiring man is required, just follow Installation instructions on sheets supplied. For further information please contact,
D. ACKLAND & SON LIMITED.

AUTOMOTIVE ACCESSORIES

Flameless Flares



"VISIBLE FOR HALF A MILE"
"NO FUEL, LAMPS OR BATTERIES"
"FLAG HOLDER FOR DAYTIME USE"
"INTENSE REFLECTOR FOR NIGHT TIME"
"FLAMELESS, ODORLESS AND SAFE TO CARRY IN CAR OR TRUCK AT ALL TIMES"

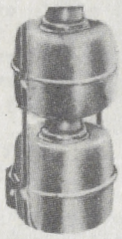
REFLECTORS:- Two brilliant 3" red Plexiglass reflectors on each side, insuring maximum reflectivity in both directions.

SIZE:- Each flare panel, 3 1/4" x 6 7/8" base. Closed 7" x 1 3/8"--in use stands 8" high on road.

FLAG HOLDER;- Built in. Flags furnished.

Set No. 79-2 Special set of two flares and carrier with flags.
List Price: $9.35

SUPER-SAFE TRUCK FLARES

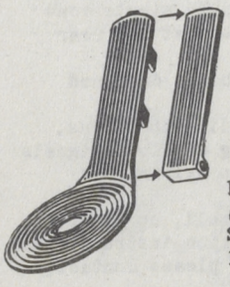


BAKED RED ENAMEL FINISH.
FREEZE-PROOF CAP.
DISAPPEARING WICK.
NON-SEIZING CAP.
LEAK-PROOF EVEN WHEN UPSET.
BURNING CAPACITY: 16 HOURS.
WILL WITHSTAND SEVERE RAIN AND WIND-STORM.
CHROME FINISH IF REQUESTED.
List Price: $7.25

MAGNETIC DASH TRAY



IT'S HERE! THE LAST WORD IN MOTORING CONVENIENCE!
THE NEW "MAGNETIC" DASH TRAY
That automatically stays where you place it!
NO SUCTION CUPS! NO SCREWS! NO BOLTS!
It's the two-purpose Dash Tray--use it as a utility holder or an Ash Tray, as desired. The new Magnetic Dash Tray requires absolutely no attachments--just place it where you want it and it stays there, ready for instant use.
Attractively designed in Grey or Walnut.
List Price: $1.50



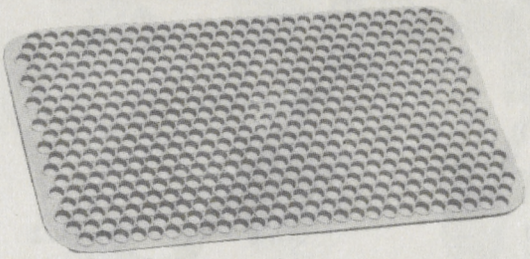
ACCELERATOR FOOT PEDAL COVER

For Driving Ease and Comfort

EASY TO INSTALL. Helps eliminate foor fatigue on long trips. Ensures "SURE GRIP SAFETY" for City driving.
List Price: $1.50

SUCTION CUP MATS

AVAILABLE IN BLACK—RED—BLUE—GREEN—TAUPE



"BEAUTIFIES AND KEEPS INSIDE OF CAR CLEAN"
"COVERS WORN SPOTS IN OLD MATS"
"PROTECTS NEW MATS FROM WEAR"

DOORWAYS STEPS KITCHENS MACHINE STANDS
LANDINGS BATHS LAUNDRIES WORK BENCHES

No. 900 FRONT MAT
18 x 19 Inches.
List Price: Black $1.75
Colours 2.35

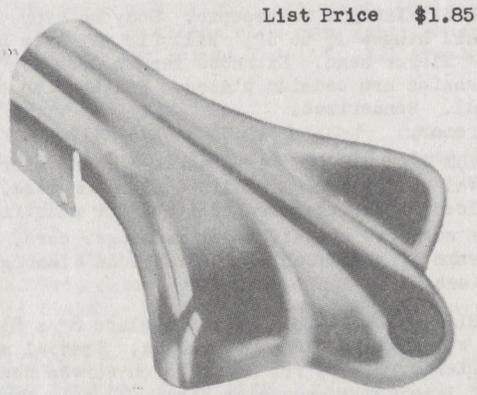
No. 910 REAR MAT
15 x 24 Inches.
List Price: Black $2.35
Colours 2.85

EXHAUST DEFLECTORS

No. 401JB (CHROMIUM)

9 1/2" long, 6" wide. With Jewel and baffle.
All jewels are held securely by a RICHLITE special design mounting, which prevents rattling, loss, or breakage and protects glass jewels from heat.

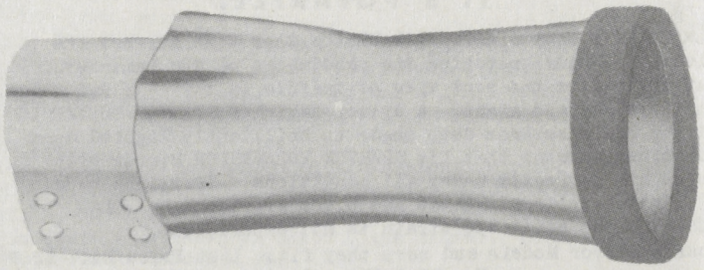
List Price $1.85



JET-GLOW No. 319 (CHROMIUM)

The beautiful Red Fluorescent Plastic Ring glows in the dark . . . providing an added safety factor . . . when parked or when tail lights fail.
Finished with the famous RICHLITE triple plate.
9" Long, 3 1/4" wide.

List Price $2.98





UNIVERSAL "AIREES"

They help to cool, ventilate, and keep fresh air circulating in all kinds of weather . . . rain, snow or shine.
No tools required for installation.

Snap easily on front ventilator.
Will fit any car.
List Price .75 per pair.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

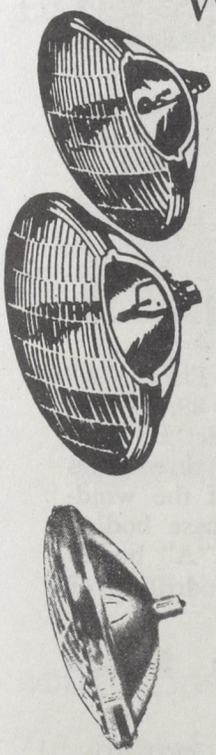
AUTOMOTIVE LIGHTING

Westinghouse Bulbs for Miniature and Sealed Beam Units

FOR AUTOMOBILE, MOTOR TRUCK AND COACH SERVICE

Westinghouse Lamp Number	List Price	Candle-Power	Bulb	Base	Volts	Service
50	.14	1	G-3½	Min. Sc.	6–8	Indicator
51	.12	1	G-3½	Min. Bay	6–8	Indicator
55	.12	2	G-4½	Min. Bay	6–8	Parking, Instrument
63	.13	3	G-6	S.C.	6–8	License, Parking, Instrument
64	.17	3	G-6	D.C.	6–8	Indicator, Instrument
81	.16	6	G-6	S.C.	6–8	Interior, Parking, Instrument
82	.18	6	G-6	D.C.	6–8	Interior
87	.30	15	S-8	S.C.	6–8	Interior, Signal
88	.34	15	S-8	D.C.	6–8	Interior
1129	.33	21	S-8	S.C.	6–8	Interior, Signal
1130	.37	21	S-8	D.C.	6–8	Interior
1110	.40	21–21	RP-11	D.C.	6–8	Headlamp
1133	.35	32	RP-11	S.C.	6–8	Spot, Diving, Fog
1000	.40	32–32	RP-11	D.C.	6–8	Headlamp
1116	.40	32–21	RP-11	D.C.	6–8	Headlamp
② 1154	.42	21–3	S-8	D.C. Index	6–8	Stop, Tail
② 1158	.41	21–3	S-8	D.C.	6–8	Stop, Tail
1186	.56	50–21	RP-11	D.C.	6–8	Headlamp
1188	.56	50–32	RP-11	D.C.	6–8	Headlamp
2320	.60	32–21	RP-11	D.C. Pref.	6–8	Headlamp
2330	.58	32–32	RP-11	D.C. Pref.	6–8	Headlamp
2331	.58	32–32	RP-11	D.C. Pref.	6–8	Headlamp
2531	.70	50–32	RP-11	D.C. Pref.	6–8	Headlamp
2520	.72	50–21	RP-11	D.C. Pref.	6–8	Headlamp
2530	.70	50–32	RP-11	D.C. Pref.	6–8	Headlamp
57	.20	1–5	G-4½	Min. Bay.	12–16	Indicator
67	.18	3	G-6	S.C.	12–16	Indicator, Marker, Instrument
68	.20	3	G-6	D.C.	12–16	Indicator, Marker, Instrument
89	.21	6	G-6	S.C.	12–16	Marker, Instrument
90	.23	6	G-6	D.C.	12–16	Marker, Instrument
93	.35	15	S-8	S.C.	12–16	Signal
94	.37	15	S-8	D.C.	12–16	Interior
1141	.37	21	S-8	S.C.	12–16	Interior, Signal
1142	.40	21	S-8	D.C.	12–16	Interior
1143	.50	32	RP-11	S.C.	12–16	Interior
1144	.50	32	RP-11	D.C.	12–16	Interior
1176	.67	21–6	S-8	D.C.	12–16	Stop, Tail
2326	.80	32–21	RP-11	D.C. Pref.	12–16	Headlamp
2336	.80	32–32	RP-11	D.C. Pref.	12–16	Headlamp

Westinghouse *Sealed Beam Lamps*



FOR HEADLIGHT, FOG, SPOTLIGHT AND TRACTOR SERVICE

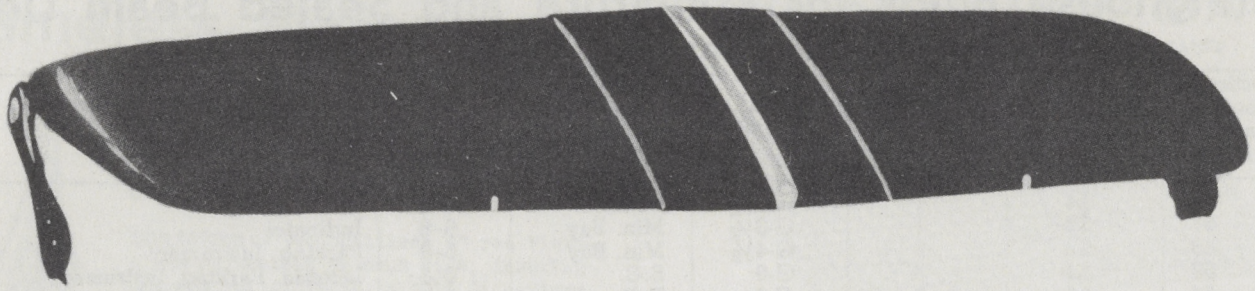
Westinghouse Lamp Number	List Price	Description	Watts	Volts	Bulb	Base	Dia. Bulb Inches	Max. Over-all Length
4030	1.70	Headlamp	45/35	6–8	Par-56	3 Contact Lugs	7	5¼
4010	1.95	Driving	30	6–8	Par-46	Screw Terms.	5¾	4
4011	1.95	Passing	30	6–8	Par-46	Screw Terms.	5¾	4
4012	1.80	Fog (Clear lens)	35	6–8	Par-46	Screw Terms.	5¾	4
4012A	2.15	Fog (Amb. lens)	35	6–8	Par-46	Screw Terms.	5¾	4
4015	1.80	Fog (Clear lens)	35	6–8	Par-36	Screw Terms.	4½	2⅝
4015A	2.15	Fog (Amb. lens)	35	6–8	Par-36	Screw Terms.	4½	2⅝
4013	1.80	Tractor	25	6–8	Par-46	Screw Terms.	5¾	4
4412	2.50	Auto, Fog	35	12–16	Par-46	Screw Terms.		4
4430	2.30	Headlamp	45/35	12–16	Par-56	3 Contact Lugs	7	5¼
4510	2.10	Auto, Utility	25	6–8	Par-36	Screw Terms.		2⅝
4516	2.15	Hand, Spot	30	6–8	Par-36	Screw Terms.		2⅝
4535	2.35	Spotlight	30	6–8	Par-46	Screw Terms.		4

CLASCO SEALED BEAM UNITS

Clasco No.	Voltage	Diam.	Type	List
1400	6–8	7"	Metal Back Headlamp Clear	1.70
1412	12–16	7"	Metal Back Headlamp Clear	2.30
146	12–16	5¾"	Metal Back Fog Amber	2.55

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

FULTON Sun Shields



- **Custom styled appearance to harmonize and blend with the most modern car design.**
- **Aluminum construction with stainless steel fittings—nothing to rust or deteriorate.**
- **Rolled reinforced edge for added rigidity.**
- **Center support for secure attachment.**
- **Concealed attachment of side brackets.**
- **Adjustable for varying car widths.**
- **Adjustable to desired height to suit the driver.**
- **Attractive Pearl-Gray Lustre finish, ready to install. Can be painted to match car.**

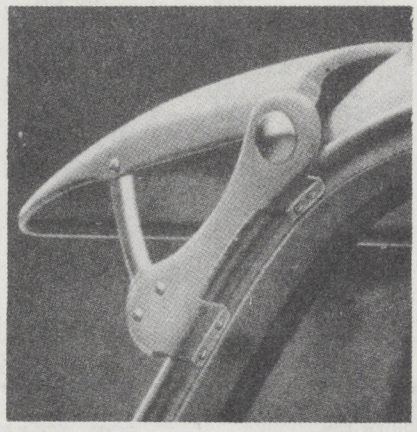
No. 800 Fulton Sun Shield

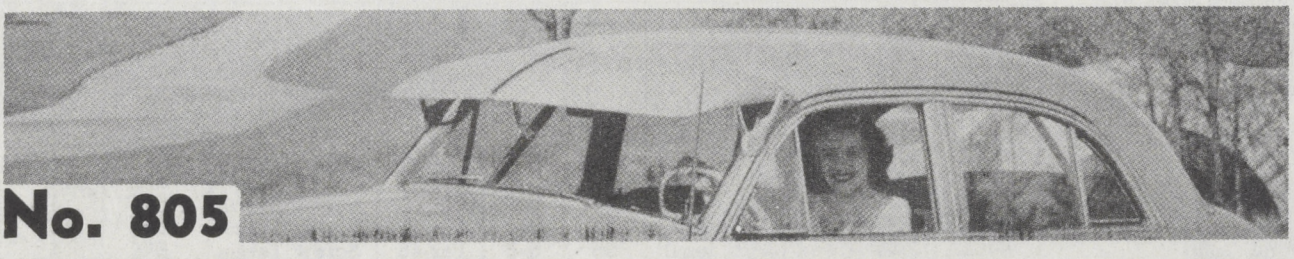
List Price: $29.95

The Fulton Sun Shield provides fullest protection for both driver and passenger against sun-glare, snow-glare and sky-glare. Helps to keep the car interior cool and comfortable for hot weather driving. Relieves eye-strain and nervous fatigue; provides protection against snow, sleet and rain on the windshield.

Supplied in Pearl-Gray Lustre finish, ready to install, for harmonious two-tone effect. Dealer can paint to color-match car, if customer desires. When this is done, the under side of the shield should be masked to preserve the soft green finish which has been scientifically determined as the color absorbing most glare and reflection.

Illustration at right shows secure method of attaching bracket to door jamb. Completely concealed, brackets cannot be removed when doors are closed.





No. 805

Illustrated above, No. 805 Sun Shield is designed especially for General Motors cars having curved two-piece windshields. Since the windshield center molding on these cars is not sufficiently strong for attachment of the two sun shield center supports, it is necessary to reinforce this molding for a satisfactory installation.

Two different types of reinforcing bars are supplied with the No. 805. Bar "N" is used with Fisher "C" bodies on the 1948-49 Cadillac, 1948-49 Oldsmobile 98 and 1949 Buick. It is securely mounted over the windshield center molding by drilling two holes through the complete center assembly and attaching by two screws and sleeve nuts.

Reinforcing Bar "O" is used with Fisher "A" bodies on 1949-50 Oldsmobile 76 and 88, 1949-50 Pontiac, 1949-50 Chevrolet, and Fisher "B" body on 1950 Buick 40 Special. It utilizes three holes already in the reinforcing channel of the windshield center assembly on most of these bodies. Some of the earliest of the Fisher "A" bodies had only two holes and will require drilling of one hole in the reinforcing channel.

List Price: $29.95

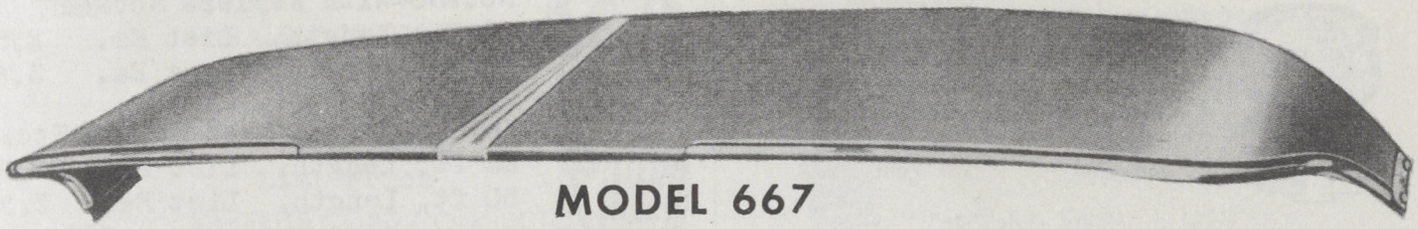
You can't go wrong with a "FULTON SUN SHIELD" TRY ONE! BUY ONE!

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

LUMIDOR SUN SHIELDS

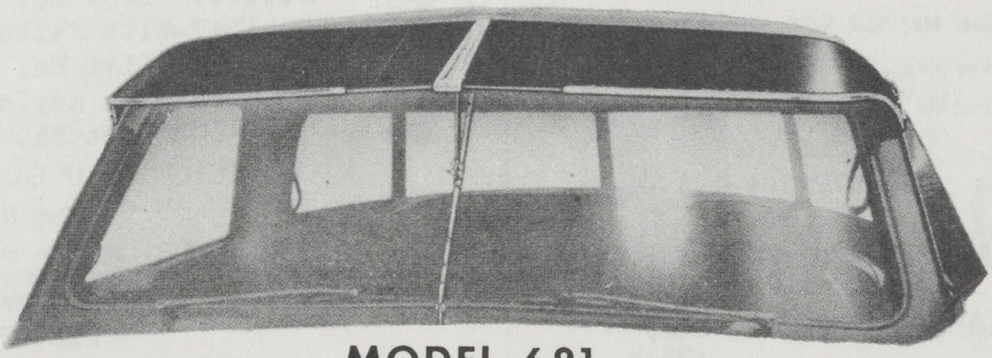
LUMIDOR SUPER VISOR • TWO MODELS

- HEAVY GAUGE ALUMINUM
- POLISHED STAINLESS STEEL BRACKETS & LEADING EDGE
- ROLLED EDGES
- NEW IMPROVED BRACKETS
- MADE OF RUSTPROOF STAINLESS STEEL AND ALUMINUM
- MODERN STREAMLINE DESIGN



MODEL 667

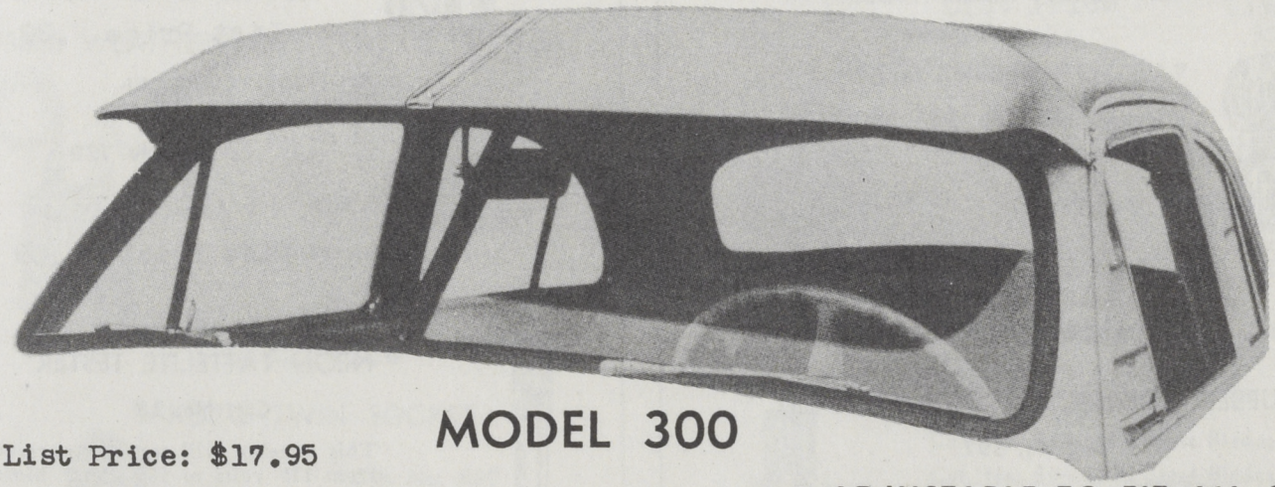
For Cars with divided windshields (including General Motors) with windshields measuring 51" to 59" wide. Easily attached to rain gutters and windshield center post.
LIST PRICE: $23.95



MODEL 681

For most cars with one piece windshield measuring 51" to 59" wide. Attaches to rain gutters and center support attaches to top edge of firewall.
LIST PRICE: $23.95

LUMIDOR SUPREME SAFETY VISOR



MODEL 300

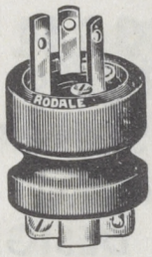
List Price: $17.95

- ROLLED EDGES.
- STAINLESS STEEL BRACKETS.
- MODERN STREAMLINE DESIGN.
- ADJUSTABLE TO FIT ALL CARS (INCLUDING GENERAL MOTORS') WITH WINDSHIELDS MEASURING 51" TO 59" WIDE. (WITH GUTTER AND WINDSHIELD CENTER POSTS).

D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

RODALE ELECTRICAL SUPPLIES



MALE HANDLE CAPS WITH 3 POLE BLADES

Cat. No. 558 With Cord Clamp

10 Amp. 250 Volt — 15 Amp. 125 Volt

Cord Hole 7-16"

List Price 1.37



FEMALE CORD CONNECTORS FOR 3 POLE BLADES

Cat. No. 568 With Cord Clamp

10 Amp. 250 Volt — 15 Amp. 125 Volt

Cord Hole 7-16"

List Price 1.73



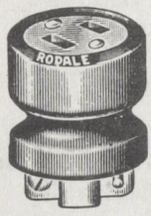
MALE HANDLE CAPS WITH PARALLEL BLADES

Cat. No. 552 With Cord Clamp

10 Amp. 250 Volt — 15 Amp. 125 Volt

Cord Hole 7-16"

List Price 1.02



FEMALE CORD CONNECTORS FOR PARALLEL BLADES

Cat. No. 562 With Cord Clamp

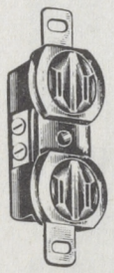
10 Amp. 250 Volt — 15 Amp. 125 Volt

Cord Hole 7-16"

Underwriters' Listed

List Price 1.02

DUPLEX FLUSH RECEPTACLES



Bakelite

Standard Strap

Cat. No. 625—Brown
Cat. No. 625V—Ivory

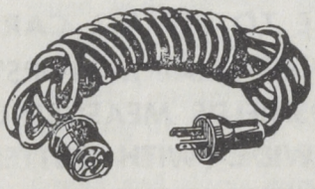
15 Amps 125 Volts — 10 Amps 250 Volts

Underwriters' Listed

List Price Brown .27
List Price Ivory .27

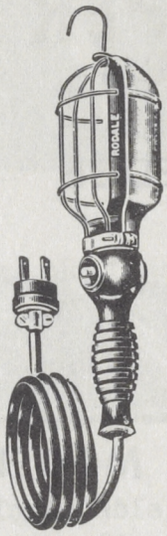
RUBBER CONNECTOR EXTENSION SET

Cat. No. 397



Soft rubber female connector with male rubber cap, wired with No. 18 - 2 rubber service cord

8 ft. Cord.
List Price .90



HEAVY DUTY TROUBLE LAMPS

With Switch or Keyless Handles

Wired with high grade rubber service cord. Equipped with unbreakable cord clamp attachment cap.

No.238-With Keyless Socket
25 ft. Length. List Ea. 2.50
50 ft. Length. List Ea. 3.60

No. 239 -With Push Switch Socket
25 ft. Length. List Ea. 2.60
50 ft. Length. List Ea. 3.70



RUBBER HANDLES & SOCKETS

No. 246-With 2 Outlets & Switch Socket. List Ea. .70
No. 247-With Switch Socket List Ea. .60
No. 248-With Keyless Socket List Ea. .50

REFLECTOR LAMP GUARD



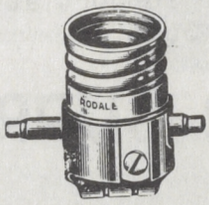
Cat. No. 37.1

Heavy wire guard with steel reflector to fit weatherproof size sockets, takes up to 75 watt bulb.

List Price .75

LAMP SOCKET INTERIORS

For Rubber & Metal Shell Sockets



Cat. No. 167 Push-Thru Switch

Cat. No. 168 Turn-Knob Switch

Cat. No. 169 Plain Keyless

List Price .20 ea

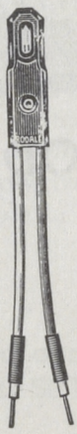
FEED-THRU SWITCH



Cat. No. 720

6 Amps. — 110 Volts

List Price .59



BAKELITE NEON TATTELITE TESTER

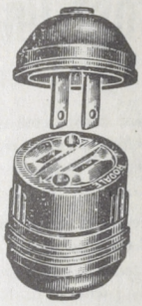
Cat. No. 18

This tattelite will test any current from 110 volts to 550 volts. Most commonly used to test live and ground wires in circuit, short circuits, blown fuses, open circuits, static, polarity, etc.

List Price .86

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

RODALE ELECTRICAL SUPPLIES



RUBBER CORD CONNECTORS

Cat. No. T61

Two-piece cord connector with soft rubber female body and male cap.

Underwriters' Listed

List Price .71

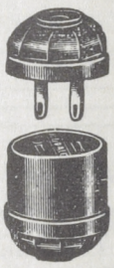
FEMALE CONNECTOR HALF

Less removable male cap

Underwriters' Listed

Cat. No. T62

List Price .53



BAKELITE CORD CONNECTORS

Two piece cord connector with bakelite female body and male cap.

Cat. No. 178

15A - 125V 10A - 250V

List Price .30

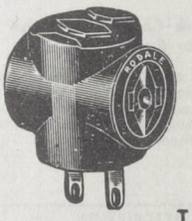
FEMALE CONNECTOR HALF

Less removable male cap

Cat. No. 179

List Price .33

BAKELITE TRIO - TAP



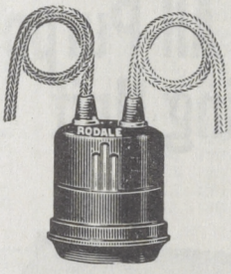
Cat. No. 582—Brown
Cat. No. 582V—Ivory

Underwriters' Listed

15A - 125V — 10A - 250V

List Price Brown .20
List Price Ivory .20

RUBBER WEATHERPROOF PIGTAIL SOCKET



Medium Base

6" No. 14 R. C. Wire Leads Stripped.

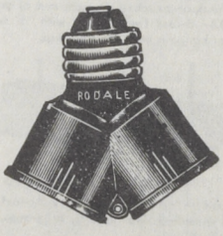
Cat. No. 132

Underwriters' Listed

660W — 250V

List Price .33

BAKELITE TWIN SOCKET



Cat. No. 600

Medium Base

660W — 250V

Underwriters' Listed

List Price .29

BAKELITE CURRENT TAP



Cat. No. 790

With Two Side Outlets

Medium Base

660W — 250V

Underwriters' Listed

List Price .33

BAKELITE PULL CHAIN CURRENT TAP



Cat. No. 795

With Two Side Qutlets

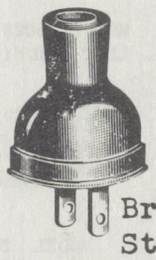
Medium Base

250W — 250V

Underwriters' Listed

List Price .51

STANDARD RUBBER HANDLE CAPS



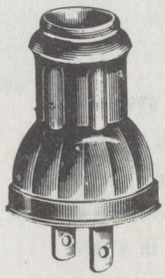
Cat. No. 502 with Brass Blades
Cat. No. 390 with Steel Blades
No. 502 Underwriters Listed

10A - 250V — 15A - 125V

Cord hole 5-16" diameter

Brass Blades List Ea. .18
Steel Blades List Ea. .13

HEAVY DUTY RUBBER HANDLE CAP



Cat. No. 503
with Brass Blades

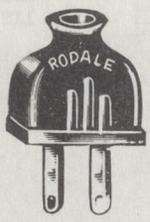
Underwriters Listed

10A - 250V — 15A - 125V

Cord hole ½" diameter

List Price .19

FLAT RUBBER GRIP CAP



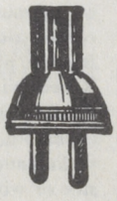
Cat. No. 506
with Brass Blades

Underwriters Listed

10A - 250V — 15A - 125V
Cord hole 5-16" diameter

List Price .18

SMALL RUBBER HANDLE CAPS



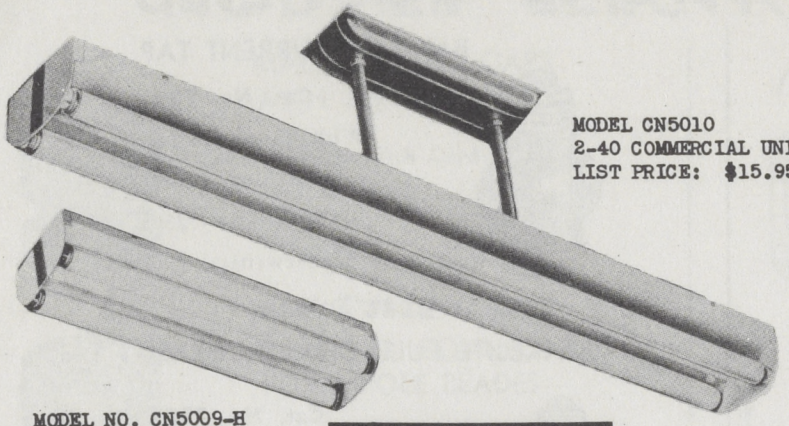
Cat. No. 519 with Brass Blades
Cat. No. 394 with Steel Blades

Furnished in bulk only

Cord hole 5-16" diameter

Brass Blades List Ea. .14
Steel Blades List Ea. .10

FLUORESCENT LIGHTING FIXTURES



MODEL CN5010
2-40 COMMERCIAL UNIT
LIST PRICE: $15.95

MODEL NO. CN5009-H
2-20 WATT "open type"
KITCHEN UNIT
LIST PRICE: $9.15

MODEL 032ST
Double Stem Canopy Set.
Can be used with both
these models.
LIST PRICE: $4.15

EASY TO CLEAN AND MAINTAIN

ALL-STEEL CONSTRUCTION

Top Quality, Low Cost Units

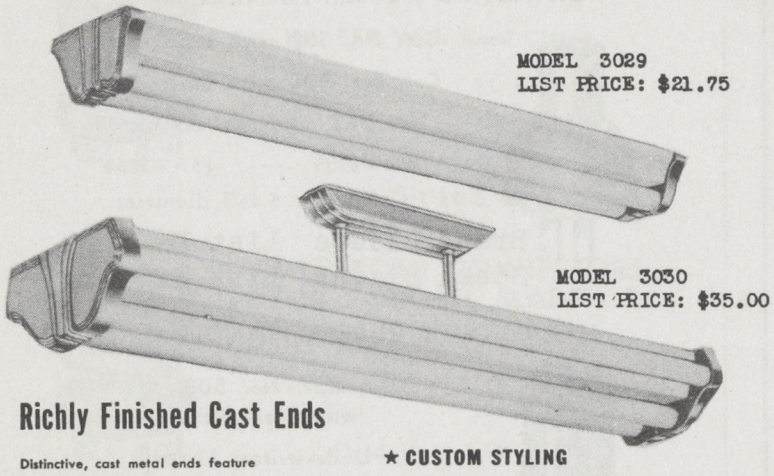
ECONOMICAL . . . EFFICIENT . . . DECORATIVE

These versatile Fluorescent Lighting Units are constructed of top quality materials, and designed to give you efficient, attractive, all purpose units at low cost. Only approved electrical components are used in the Special Value Group.

Model CN5010 – Here is a general purpose open type Commercial fixture, adaptable to numerous applications, constructed of heavy gauge steel with white baked enamel finish. Surface or Suspension mounting (with 032ST Stem Set). Individually packed. For 110-125 Volt, 60 cycle operation.

Model CN5009 – This attractive open type Kitchen unit combines beauty with utility and economy. Heavy gauge steel construction, baked enamel finish. Surface mounting only. Individually packed. For 110-125 Volt, 60 cycle operation.

Model	Shipping Weight	Description
CN5010	16	2-40 watt Commercial unit; 48" long, 4¾" high, 6" wide
CN5009-H	9	2-20 watt HPF Kitchen Unit; 24" long, 3¾" high, 6" wide
032ST	4	Double Stem Canopy Set



MODEL 3029
LIST PRICE: $21.75

MODEL 3030
LIST PRICE: $35.00

Richly Finished Cast Ends

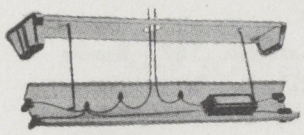
Distinctive, cast metal ends feature rich embossed design, finished in beautiful satin aluminum. The luxurious detail of these attractively contoured ends imparts outstanding smartness and pleasing character to this unusually appealing bare-lamp fixture.

★ CUSTOM STYLING
★ MAXIMUM LIGHT OUTPUT
★ SIMPLIFIED CONTINUOUS ROW INSTALLATION
★ MOUNTS IN A JIFFY

The Ideal in Fixtures – Handsome Appearance at Low Cost

Now — MITCHELL combines the beauty of new irresistible styling with the economy of a bare-lamp fixture! Here — at new LOW COST — is more effective and attractive commercial lighting, designed for easy surface or stem suspension mounting, singly or in continuous rows.

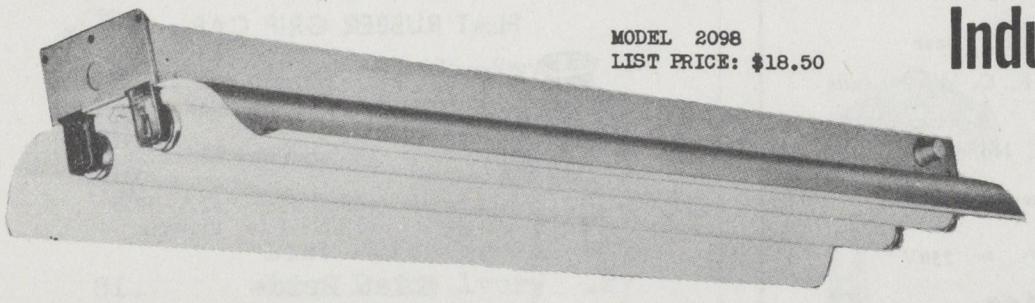
"SUPER-VALUE" Luminaires feature exclusive Jack Chain Suspension for amazingly simplified installation and maintenance. Has smooth, graceful channel of heavy gauge steel, durably finished in Baked White Enamel. Uses latest Approved Type Ballasts (High Power Factor). Completely wired, ready to hang. Abundant knockouts and convenient holes are provided for easy mounting. For suspension mounting, use Canopy and Stem Set No. 032 ST (extra). Individually packed. For 110-125 volt 60 cycle, 25 cycle AC, and instant start.



Jack Chain Suspension for Easy Installation

Two jack chains with "S" hooks suspend reflector body from channel plate for easy wiring access. No need to hold reflector or ballast while wiring unit. Saves installation time — simplifies maintenance.

Model No.		DESCRIPTION
3029		2-40 Watt Commercial Luminaire with Cast Ends; 49" long, 5" high, 7¾" wide.
3030		4-40 Watt Commercial Luminaire with Cast Ends; 49½" long, 5" high, 11" wide.
032ST		Canopy and Stem Suspension Set



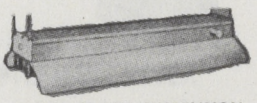
MODEL 2098
LIST PRICE: $18.50

Industrial All-Purpose Lighting Unit

Economical, High-Intensity Lighting for Every Industrial Application . . .

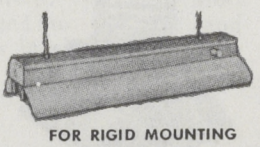
Here is an amazing value in high-intensity, comfortable fluorescent illumination for all-purpose application in any plant or shop. The MITCHELL Model No. 2098 is a rugged, dependable industrial unit—a scientifically designed source of easy-on-the-eyes light that steps up output in every working area. Never before has such a versatile, efficient unit been offered at so low a cost.

The Model No. 2098 unit can be chain-suspended singly or in continuous rows, quickly and easily—or rigid stem—or rod-mounted for assembly lines. Strong steel wireway construction, with knockouts on top and at both ends. Bracket provided at each end for easy chain hanging. Reflector is finished in hard, glossy white baked enamel for maximum light output. Wireway channel is finished in smooth, durable gray. Incorporates latest type ballasts, sockets and FS-4 starters. (Starters are easily accessible on side of wireway channel.) Uses two T-12 40-watt fluorescent lamps. Operates on 110-125 volts, 60 cycles Alternating Current. Also available in 25 cycle and 60 cycle instant-start.



FOR CHAIN SUSPENSION

Easy to hang with convenient suspension chains (extra) which hook on brackets at each end of the unit. PART No. 302—8-foot Tenso chains with "S" hooks, available for hanging units from ceilings.



FOR RIGID MOUNTING

Knockouts on top of steel wireway channel permit stem or rod mounting, individually, in groups, or in continuous rows.

D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

LACO QUALITY LAMPS

Watts	Volts	Bulb	Description	List Price	Base	Std. Pkg. Qty.	Rated Initial Lumens	Max. Over-all Length (Inches)	Aver. Light Centre Length (Inches)	Position of Burning
LACO LAMPS FOR 110, 115, 120 VOLT CIRCUITS										
6	110, 115, 120	S-6	Clear	$0.22	Cand.	100	40	1 7/8	1 5/16	Any
7	120	C-7	Clear	.17	Cand.	100	50	2 1/8	....	Any
7	120	C-7	Outside Colored White and Red	.18	Cand.	100	....	2 1/8	....	Any
7 1/2	115-125 only	S-11	White, Red, Blue, Green	.22	Med.	120	....	2 1/4	1 5/8	Any
10	110, 115, 120	S-11	Clear and Inside Frosted	.22	Int.	120	79	2 5/16	1 5/8	Any
10	110, 115, 120	S-11	Colored*	.29	Int.	120	....	2 5/16	....	Any
10	110-115, 115-120	S-14	Clear and Inside Frosted	.21	Med.	120	79	3 1/2	2 1/2	Any
10	110-115, 115-120	S-14	Colored*	.28	Med.	120	....	3 1/2	....	Any
15	110-115, 115-120	A-15	Inside Frosted	.18	Med.	120	135	3 1/2	2 3/8	Any
15	120	F-10	Outside Colored†	.30	Cand.	60	....	3 1/16	....	Any
15	110, 115, 120	T-7	I.F. Home Appliance	.35	D.C. Bay	100	107	2 5/8	....	Any
15	110, 115, 120	T-7	I.F. Home Appliance	.45	Cand.-Int.	100	107	2 5/8	....	Any
25	110-115, 115-120	A-19	Inside Frosted	.18	Med.	120	260	3 15/16	2 1/2	Any
25	110-115, 115-120	A-19	Clear Milltype	.30	Med.	120	235	3 15/16	2 1/2	Any
25	110-115, 115-120	A-19	Colored‡	.27	Med.	120	....	3 15/16	2 1/2	Any
25	110-115, 115-120	A-19	Daylight Clear	.42	Med.	120	170	3 15/16	2 1/2	Any
25	115-120	F-15	Clear, Frosted and Colored°	.25	Med.	120	....	4 1/2	....	Any
25	110, 115, 120	T-6 1/2	Clear Showcase	.52	Int.	60	235	5 1/2	....	Any
25	110-115, 115-120	T-10	Clear Showcase	.37	Med.	60	235	5 5/8	....	Any
25	110-115, 115-120	T-10	I.F. Showcase	.42	Med.	60	235	5 5/8	....	Any
25	110-115, 115-120	T-10	I.F., Side Aluminized	1.15	Med.	60	....	5 5/8	....	Any
30	120	T-8	Inside White Lumiline	1.80	Disc.	24	....	17 3/4	....	Any
40	110-115, 115-120	A-19	Inside Frosted	.18	Med.	120	440	4 1/4	2 7/8	Any
40	115-120	A-21	Colored‡	.34	Med.	120	....	4 7/16	....	Any
40	110, 115, 120	T-8	Clear Showcase	1.30	Med.	24	410	11 7/8	....	Any
40	120	T-8	Inside White Lumiline	1.45	Disc.	24	....	11 3/4	....	Any
40	110, 115, 120	T-10	I.F., Side Aluminized	1.15	Med.	60	....	5 5/8	....	Any
40 / 60 / 100	115-120	A-23	I.F. Three Lite	.60	3 Cont. Med.	60	412 / 720 / 1132	5 1/2	3 1/2	Any
50	110-115, 115-120	A-19	Inside Frosted Rough Service	.35	Med.	120	455	3 15/16	2 1/2	Any
50	110-115, 115-120	A-19	Clear Milltype	.30	Med.	120	540	3 15/16	2 1/2	Any
50 / 100 / 150	110, 115, 120	PS-25	Inside Frosted 3-Lite	.65	3 Cont. Mog.	60	525 / 1420 / 1945	6 13/16	5	Any
60	110-115, 115-120	A-21	Inside Frosted	.18	Med.	120	780	4 15/16	3 3/8	Any
60	110, 115, 120	A-21	Clear Traffic Signal	.35	Med.	120	660	4 7/16	2 7/16	B.D. to H.
60	110-115, 115-120	A-21	Daylight Inside Frosted	.35	Med.	120	545	4 15/16	3 3/8	Any
60	110-115, 115-120	A-21	I.F. Bowl Reflector	.43	Med.	120	....	4 15/16	3 3/8	Any
60	120	T-8	Inside White Lumiline	1.65	Disc.	24	....	17 3/4	....	Any
100	110-115, 115-120	A-23	Inside Frosted, 750 hr.	.21	Med.	120	1520	6 1/16	4 3/8	Any
100	110-115, 115-120	A-23	Inside Frosted, 1000 hr.	.29	Med.	120	1480	6 1/16	4 3/8	Any
100	110-115, 115-120	A-23	Clear, 1000 hr.	.31	Med.	120	1480	6 1/16	4 3/8	Any
100	110-115, 115-120	A-23	Daylight Inside Frosted	.50	Med.	120	962	6 1/16	4 3/8	Any
100	110-115, 115-120	A-23	I.F. Bowl Reflector	.53	Med.	120	....	6 1/16	4 3/8	Base Up
100	110, 115, 120	A-23	I.F. Vibration	.49	Med.	120	1300	6 1/16	4 3/8	Vert.
100	110, 115, 120	A-23	I.F. Rough Service	.49	Med.	120	1150	6 1/16	4 3/8	Any
100	110, 115, 120	PS-30	I.F. Neck Reflector	.55	Med.	60	....	8 1/16	....	Any
100 / 200 / 300	110, 115, 120	G-30	Inside Frosted 3-Lite	.80	3 Cont. Mog.	60	1380 / 3300 / 4680	6 3/4	3 3/4	Base Down
150	110, 115, 120	PS-25	Clear and Inside Frosted, 750 hr.	.28	Med.	60	2520	6 15/16	5 1/4	Any
150	110, 115, 120	PS-25	Clear and Inside Frosted, 1000 hr.	.38	Med.	60	2400	6 15/16	5 1/4	Any
150	110, 115, 120	PS-25	Daylight Clear	.56	Med.	60	1680	6 15/16	5 1/4	Any
150	110, 115, 120	PS-25	I.F. Bowl Reflector	.63	Med.	60	....	6 15/16	5 1/4	Base Up
150	110, 115, 120	PS-30	I.F. Neck Reflector	.65	Med.	60	....	8 1/16	....	Any
200	110, 115, 120	PS-30	Clear and Inside Frosted, 750 hr.	.38	Med.	60	3560	8 1/16	6	Any
200	110, 115, 120	PS-30	Clear and Inside Frosted, 1000 hr.	.51	Med.	60	3400	8 1/16	6	Any
200	110, 115, 120	PS-30	Daylight Clear	1.00	Med.	60	2380	8 1/16	6	Any
200	110, 115, 120	PS-30	I.F. Bowl Reflector	.90	Med.	60	....	8 1/16	6	Base Up
200	110, 115, 120	PS-35	I.F. Neck Reflector	.95	Med.	24	....	8 3/4	....	Any
300	110, 115, 120	PS-30	Clear, 750 hr.,	.56	Med.	60	5730	8 3/4	6	Any
300	110, 115, 120	PS-30	Inside Frosted, 750 hr.,	.56	Med.	60	5730	8 3/4	6	Any
300	110, 115, 120	PS-30	Clear, 1000 hr.,	.75	Med.	60	5510	8 3/4	6	Any
300	110, 115, 120	PS-30	Inside Frosted, 1000 hr.,	.75	Med.	60	5510	8 3/4	6	Any
300	110, 115, 120	PS-35	Clear, 1000 hr.,	.75	Mog.	24	5510	9 3/8	7	Any
300	110, 115, 120	PS-35	Inside Frosted, 1000 hr.,	.75	Mog.	24	5510	9 3/8	7	Any
300	110, 115, 120	PS-35	Daylight Clear	1.55	Mog.	24	3650	9 3/8	7	Any
300	110, 115, 120	PS-35	I.F. Bowl Reflector	1.65	Mog.	24	....	9 3/8	7	Base Up
300	110, 115, 120	PS-40	I.F. Neck Reflector	1.70	Mog.	12	....	9 3/4	....	Any
500	110, 115, 120	PS-40	Clear	1.33	Mog.	12	9750	9 3/4	7	Any
500	110, 115, 120	PS-40	Inside Frosted	1.40	Mog.	12	9750	9 3/4	7	Any
500	110, 115, 120	PS-40	Daylight Clear	3.25	Mog.	12	6400	9 3/4	7	Any
500	110, 115, 120	PS-40	I.F. Bowl Reflector	2.40	Mog.	12	....	9 3/4	7	Base Up
750	110, 115, 120	PS-52	Clear	4.05	Mog.	6	15,000	13 1/16	9 1/2	Any
750	110, 115, 120	PS-52	Inside Frosted	4.30	Mog.	6	15,000	13 1/16	9 1/2	Any
750	110, 115, 120	PS-52	I.F. Bowl Reflector	6.65	Mog.	6	....	13 1/16	9 1/2	Base Up
1000	110, 115, 120	PS-52	Clear	4.35	Mog.	6	21,000	13 1/16	9 1/2	Any
1000	110, 115, 120	PS-52	Inside Frosted	4.60	Mog.	6	21,000	13 1/16	9 1/2	Any
1000	110, 115, 120	PS-52	I.F. Bowl Reflector	7.00	Mog.	6	....	13 1/16	9 1/2	Base Up
1500	110, 115, 120	PS-52	Clear	6.65	Mog.	6	32,550	13 1/16	9 1/2	Any
1500	110, 115, 120	PS-52	Inside Frosted	7.00	Mog.	6	32,550	13 1/16	9 1/2	Any

*Red, Blue, Green, Yellow, Amber-Orange, Flametint, White.
‡Red, Blue, Green, Yellow, Amber-Orange, Flametint, Ivory, Old Rose.
*Amber-Orange, Flametint, Ivory, Old Rose, White.
†Flametint, Ivory, White.

Approx. Lamp Watts	Bulb	Color of Light Produced	List Price	Std. Pkg. Qty.	Nom. M.O.L. (Ins.)	Base
LACO FLUORESCENT LAMPS For use only with specially designed auxiliary equipment to produce proper electrical values. (Specify when 25 cycle required)						
6W	T-5	Standard Cool White, Standard Warm White, Daylight, White	1.10	25	9	Min. Bipin
8W	T-5	Standard Cool White, Standard Warm White, Daylight, White	1.30	25	12	Min. Bipin
13W	T-5	Standard Cool White, Standard Warm White, Daylight, White	1.35	25	21	Min. Bipin
*14W	T-12	Standard Cool White, Standard Warm White, Daylight, White	1.10	25	15	Med. Bipin
*15W	T-8	Standard Cool White, Standard Warm White, Daylight, White	.90	25	18	Med. Bipin
*15W	T-12	Standard Cool White, Standard Warm White, Daylight, White	1.10	25	18	Med. Bipin
*20W	T-12	Standard Cool White, Standard Warm White, Daylight, White	1.10	25	24	Med. Bipin
*30W	T-8	Standard Cool White, Standard Warm White, Daylight, White	1.10	25	36	Med. Bipin
†40W	T-12	Standard Cool White, Standard Warm White, Daylight, White	1.30	25	48	Med. Bipin
85W	T-17	Standard Cool White, Standard Warm White, Daylight, White	3.20	12	60	Mog. Bipin

D. ACKLAND & SON, Limited
Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

CAR RADIOS and AERIALS

The *New* GR Car Radios Give Trouble-free Service

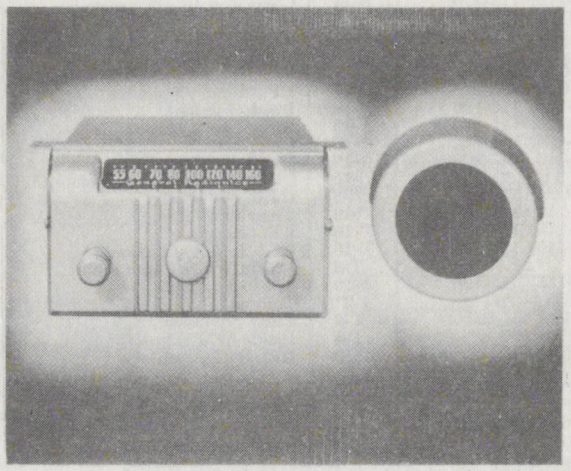
SIX TUBES
EXTREME SENSITIVITY

6" SPEAKER
BUILT TO LAST

EASY INSTALLATION
90 DAY FACTORY WARRANTY

MODEL CR9 — GR *Car Radio*

"FITS UNDER THE DASH OF ANY CAR"



Canada's GREATEST *Universal* Car Radio VALUE at only **$53.95**

With All These NEW GR Features!

NEW two-tone front smartly styled in modern plastic.

NEW color-choice of gold and brown or silver and grey.

NEW high quality finish to enhance your car interior.

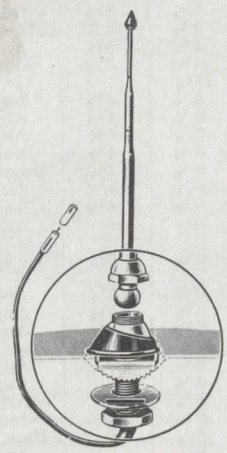
NEW control knobs scientifically shaped to your touch.

NEW improved clarity for your listening enjoyment.

NEW low current consumption for greater economy.

NEW improved ventilation, lower operating temperature.

NEW optional model for 12-volt operation (slightly extra).



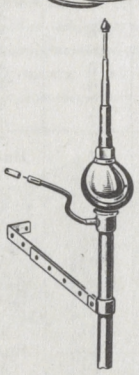
ICA "PEERLESS" MODEL

New streamlined disappearing antenna, designed especially for 1949 and earlier model cars. Features unique swivel base permitting easy angle adjustment to match contours of new cars.

HI-Q low loss cable (48") has inner polyethylene insulation with vinylite jacket.

MODEL NO.	DESIGNATIONS	SECTIONS	LENGTH CLOSED	LENGTH OPEN	LIST PRICE
4571	"Peerless"	3	6½"	56"	$9.45

EQUIPPED WITH BOTH MOTOROLA AND DELCO FITTINGS.

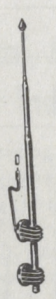


FEATURES: Swivel insulator base permitting varying mounting positions to harmonize with contour of car...generous length (48") HI-Q low loss cable has inner polyethylene insulation with vinylite jacket.

(1) Patented brass shim contacts to prevent rattling and vibration.
(2) Triple-chrome-plated Admirality Brass...Rustproof.
(3) Dust and moisture proof.
(4) Snug-fitting tapered telescopic joints.

MODEL NO.	DESIGNATION	SECTIONS	LENGTH CLOSED	LENGTH OPEN	List Price
4575	"TOPPER"	3	26"	62"	$7.40

STANDARD SIDE COWL ANTENNAS



The literally hundreds of thousands of these all-purpose side cowl antennas constantly being sold to car owners is evidence of their lasting, quality performance and popularity. The series includes a variety of types for wide application. Chosen as Standard equipment by auto manufacturers, Government Agencies, Police Departments etc.

(1) Triple-chrome plated Admirality Brass.
(2) Noiseless. . . Rattleproof.
(3) Patented brass shim contacts.
(4) Sturdy Bakelite Insulators.
(5) HI-Q low loss cable (36") has inner polylene insulation with vinylite jacket.

MODEL NO.	Designation	Sections	Length Closed	Length Open	LIST PRICE
4566	"Chancellor"	3	20"	63"	$5.95
4553	"President	3	31½"	93"	7.40

WE SPECIALIZE IN BURGESS BATTERIES

JEWEL RADIOS

The MITCHELL Lumitone TABLE LAMP-RADIO



In the . . .
Playroom
Living Room
Den or Office
Reception Room

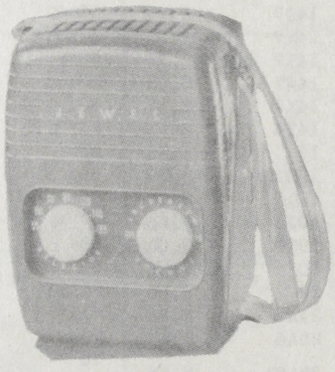
Models

LUMITONE
Silk or Parchment Shade
$49.50

LUMITONE TWIN
Silk or Parchment Shade
(Less Radio)
$24.75

Now enjoy the luxury and convenience of eye-saving illumination plus a fine-toned dependable radio--both in one compact unit, the "LUMITONE" Attractive cream plastic base. . . Complete with 40-60-100 watt 3-way switch, and opal plastic reflector bowl. Choice of 2 modern shades, celanese silk or parchment. You'll want to own this smart combination.

JEWEL "TEE-NEE"
MODEL 814 PERSONAL PORTABLE

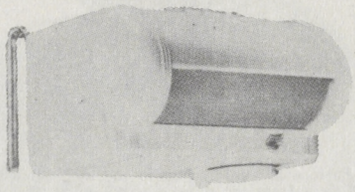


A tiny battery-operated portable---no larger than your hand! Especially popular with the junior crowd. A favourite with women because of its smart styling and bright colors.

(1) 4 tube superheterodyne circuit.
(2) Self-contained loop antenna.
(3) Large Alnico 5 speaker.
(4) Exclusive JEWEL "sound focus" feature beams sound direct to your ear.
(5) All plastic cabinet with plastic hand strap.
(6) Colors: Ivory, Maroon, Green and Beige.

List: $19.95

THE MITCHELL Lullaby BED LAMP-RADIO



HERE'S THE SMARTEST BEDTIME STORY EVER TOLD.....

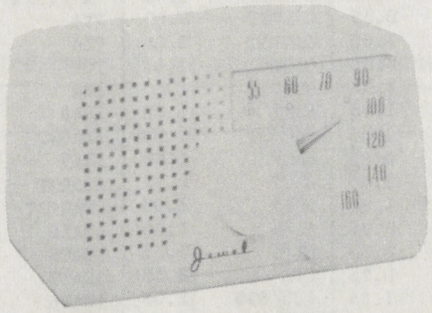
Relax in the luxury of your bed..... listen to favourite radio programmes. Read under light kind to your eyes. Your "LULLABY" is within easy reach just above your bed. Smartly styled plastic cabinet comes complete with adjustable mar-proof brackets that fit any bed. Lamp or radio operate separately or together as desired. for sweet luxury in bed, own a "LULLABY"



Soft Ivory
or deep-toned
Walnut finish

$39.50

JEWEL
MODEL 956 TABLE RADIO



Tomorrow's styling to-day, in the lowest priced radio of its class! A big, bold dial, controlled by the new JEWEL dial drive, bestows distinctive character. Extraordinary value in a 5 tube set with self-contained loop!

(1) Superheterodyne circuit with 2 I.F. transformers.
(2) 5 tubes including rectifier.
(3) A.C.--D.C. operation
(4) Advanced styling.
(5) Self-contained loop antenna.
(6) Exclusive new dial drive eliminates old-fashioned stringing.
(7) Size: 9 5/8" wide, 6" high, 4 7/8" deep.
(8) Moulded all-plastic cabinet in pure plastic colors. Ivory, Walnut and Ebony.

List Price		
	Walnut	$29.95
	Ebony	29.95
	Ivory	31.95

JEWEL DELUXE "WAKEMASTER"
MODEL 935 — WITH LULLABY SWITCH

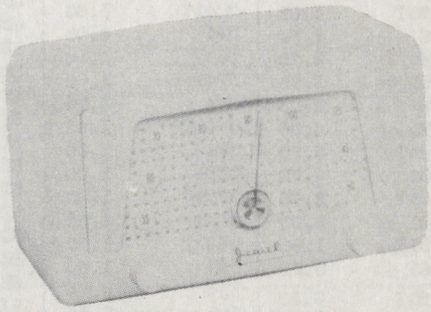


No more "alarm clock nerves"! Here's the modern way to go to sleep, the pleasant way to start the day. With one setting, lulls you to sleep to music, then shuts itself off. Next morning, wakes you to music or news, all automatically! If you doze, buzzes until you get up. Use it as a clock, radio or electronic reminder--separately or together.

(1) Superheterodyne radio with 5 tubes, including rectifier.
(2) TELECHRON sweep-second alarm movement.
(3) Self-enclosed loop antenna.
(4) C.S.A. approved. 60 cycles A.C. Also available for 25 cycles, 115 volt operation.
(5) Size: 6¼" high, 10⅜" wide, 5¼" deep.
(6) Moulded all-plastic cabinet in pure plastic colors: Ivory and Walnut.

LIST PRICE: Ivory $59.95
Walnut

JEWEL
MODEL 960 TABLE RADIO



An entirely new concept of dial design-with more than 30 square inches of dial face for simplified tuning! Note the plaque-type numerals and ornamental indicator. . . the graceful lines. . . the handsome synnetry. Picture this model in YOUR home.

(1) Superheterodyne circuit.
(2) Uses 2 I.F. transformers
(3) 5 tubes including rectifier.
(4) A.C.--D.C. operation.
(5) Self-contained loop antenna.
(6) Size: 7 1/8" high, 12 5/8" wide, 5 1/8" deep.
(7) Moulded all-plastic cabinet in pure plastic colors. Ivory, Walnut and Ebony.

LIST PRICE:		
	Walnut	$34.95
	Ebony	34.95
	Ivory	36.95

MARCONI RVC RADIOTRONS







GUARANTEE:—Marconi RVC Radiotrons are guaranteed to the user against defective material or workmanship for a period of 90 days from the date of purchase by the user.

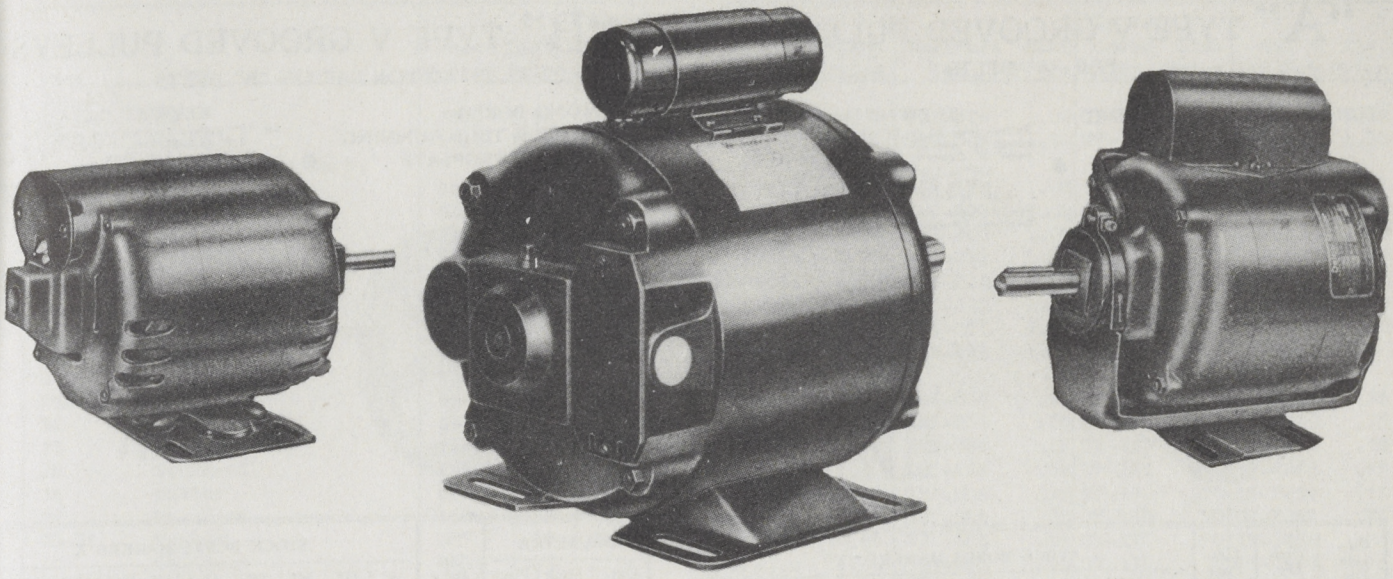
Tubes found defective as above and replaced to the user, will be replaced with another tube of the same type to the Jobber upon presentation of the defective tube at any of our branch warehouses.

PRICE LIST

01A	1.30	1T6	2.50	6AQ6	1.80	6N7	2.50	7B5	1.80	12SF7	2.05	34	3.35
01B	1.30	1U4	2.05	6AQ7GT	2.50	6N7GT	2.50	7B6	1.80	12SG7	2.05	35	2.05
01C	1.30	1U5	1.80	6AR5	1.65	6P5GT	2.50	7B7	1.80	12SH7	2.05	35A5	1.80
0A4G	2.75	1V	2.25	6AS5	2.05	6Q7	2.05	7B8	1.80	12SJ7	1.65	35B5	2.05
0Y4	5.00	1V5	2.25	6AS7G	9.95	6Q7G	1.80	7C4	2.75	12SJ7GT	1.65	35C5	2.05
0Z4	1.65	2A3	3.35	6AT6	1.50	6Q7GT	1.80	7C5	1.80	12SK7	1.65	35L6GT	1.65
0Z4A	2.10	2A4G	5.00	6AU6	2.05	6R7	2.75	7C6	1.80	12SK7GT	1.65	35W4	1.20
0Z4G	1.65	2A5	2.25	6AV6	1.50	6R7G	2.75	7C7	1.80	12SL7GT	2.50	35Y4	1.80
1A3	2.25	2A6	2.75	6B4G	3.35	6R7GT	2.75	7E5	2.75	12SN7GT	2.25	35Z3	1.80
1A4P&T	4.05	2A7	2.75	6B5	3.35	6S7	2.75	7E6	1.80	12SQ7	1.50	35Z4GT	1.50
1A5GT	1.80	2B7	2.75	6B6G	2.25	6S7G	3.35	7E7	2.50	12SQ7GT	1.50	35Z5GT	1.20
1A6	3.35	2E5	2.75	6B7	3.35	6S8GT	2.75	7F7	2.50	12SR7	2.25	35Z6G	2.75
1A7GT	2.25	2V3G	4.25	6B8	3.35	6SA7	1.65	7F8	3.00	12SR7GT	2.25	36	2.75
1AB5	2.75	2X3	1.20	6B8G	3.35	6SA7GT	1.65	7G7/1232	3.00			37	1.80
1AC5	2.50	3A4	2.25	6BA6	1.80	6SB7Y	2.50	7G8	4.25	12SY7	2.35	38	2.25
1AD5	2.50	3A5	3.72	6BA7	2.50	6SC7	2.05	7H7	2.05	12Z3	2.75	39/44	2.75
1B1	1.60	3A8GT	5.00	6BD6	2.05	6SD7GT	3.00	7J7	3.00	14A4	2.75	40	2.35
1B3GT/8016	3.35	3B7	2.75	6BE6	1.80	6SF5	1.65	7K7	2.75	14A5	5.00	41	1.65
1B4P	4.05	3C6	3.35	6BF6	1.65	6SF5GT	1.80	7L7	2.50	14A7/12B7	2.25	42	1.65
1B5/25S	3.35	3D6/1299	2.75	6BG6G	5.70	6SF7	2.05	7N7	2.25	14AF7/XXD	2.50	43	1.65
1B7GT	3.35	3E6	2.75	6BH6	2.25	6SG7	2.05	7Q7	1.80	14B6	2.25	45	1.65
1C5GT	2.25	3LF4	2.75	6BJ6	2.05	6SH7	2.25	7R7	2.25	14B8	2.25	45Z3	1.80
1C6	3.35	3Q4	2.25	6BN6	3.35	6SH7GT	2.05	7S7	3.35	14C5	2.75	45Z5GT	1.80
1C7G	3.35	3Q5GT	2.50	6C4	1.65	6SJ7	1.65	7V7	3.35	14C7	2.25	46	2.75
1D5GP	4.05	3S4	2.05	6C5	1.65	6SJ7GT	1.65	7W7	2.75	14E6	2.05	47	2.50
1D7G	3.35	3V4	2.25	6C5GT	1.65	6SK7	1.65	7X6	2.25	14E7	2.50	48	4.25
1D8GT	4.05	4A6G	2.90	6C6	2.05	6SK7GT	1.65	7X7/XXFM	3.00	14F7	2.50	49	2.75
1E5GP	4.05	5AZ4	1.35	6C8G	3.36	6SL7GT	2.50	7Y4	1.80	14F8	3.00	50	4.05
1E7GT	4.05	5R4GY	3.00	6D6	1.65	6SN7GT	2.25	7Z4	1.80	14H7	2.25	50A5	2.25
1E8	2.50	5T4	4.05	6D8G	3.35	6SQ7	1.50	10Y	4.05	14J7	3.00	50B5	2.05
1F4	2.75	5U4G	1.50	6E5	2.25	6SQ7GT	1.50	12A	2.35	14N7	2.75	50C5	2.05
1F5G	2.75	5V4G	3.00	6F5	1.65	6SR7	1.80	12A6	3.00	14Q7	2.25	50C6G	3.00
1F6	4.05	5W4	2.75	6F5GT	1.65	6SR7GT	1.80	12A6GT	3.00	14R7	2.75	50L6GT	1.65
1F7G	4.05	5W4GT	1.65	6F6	2.05	6SS7	1.80	12A7	3.35	14S7	3.35	50X6	2.25
1G4GT	2.75	5X4G	1.80	6F6G	1.65	6ST7	2.75	12A8GT	2.05	14W7	3.00	50Y6G	1.80
1G5G	2.75	5Y3G	1.00	6F6GT	1.65	6SV7	3.00	12AH7GT	2.75	14X7	2.75	50Y6GT	1.80
1G6GT	2.75	5Y3GT	1.00	6F7	3.35	6SZ7	2.25	12AL5	2.05	14Y4	2.25	50Y7GT	2.05
1H4G	2.25	5Y4G	1.50	6F8G	3.35	6T7G	3.35	12AT6	1.50	19	3.35	53	2.75
1H5GT	1.80	5Y4GT	1.50	6G6G	2.75	6T8	3.35	12AT7	3.00	19BG6G	6.30	55	2.25
1H6G	3.35	5Z3	1.80	6H6	1.65	6U5/6G5	2.05	12AU6	2.05	19C8	3.70	56	1.80
1H6GT	3.35	5Z4	2.75	6H6GT	1.65	6U6GT	2.05	12AU7	2.50	19J6	3.35	57	2.05
1J6G	3.00	6A3	3.35	6J5	1.50	6U7G	1.80	12AV6	1.50	19T8	3.00	58	2.05
1J6GT	3.35	6A5G	4.05	6J5G	1.50	6V6	3.35	12AW6	2.75	20	4.25	59	3.70
1L4	2.05	6A6	2.75	6J5GT	1.50	6V6G	2.05	12AX7	2.50	22	3.50	70L7GT	4.05
1L6	2.75	6A7	2.05	6J6	3.00	6V6GT	2.05	12AY7	6.30	24A	2.25	71A	2.05
1LA4	2.75	6A8	2.05	6J7	2.05	6W4GT	1.80	12BA6	1.80	25A6	3.35	75	1.65
1LA6	2.75	6A8G	2.05	6J7G	2.05	6W7G	2.75	12BA7	2.50	25A6G	2.75	76	1.65
1LB4	2.75	6A8GT	2.05	6J7GT	2.05	6X4	1.50	12BD6	2.05	25A7GT	5.25	77	1.65
1LC5	2.75	6AB4	2.05	6J8G	3.35	6X5	2.75	12BE6	1.80	25AC5GT	4.05	78	1.65
1LC6	2.75	6AB5/6N5	2.75	6K5GT	2.50	6X5GT	1.50	12C8	3.35	25C6G	3.00	79	2.75
1LD5	2.75	6AB7/1853	3.35	6K6G	1.50	6Y6G	2.50	12F5GT	1.80	25L6	3.35	80	1.15
1LE3	2.75	6AC5GT	3.00	6K6GT	1.50	6Y7G	2.30	12H6	1.80	25L6GT	1.80	81	4.05
1LG5	2.75	6AC7/1852	3.00	6K7	1.65	6Z7G	4.05	12J5GT	1.65	25W4GT	2.05	82	2.75
1LH4	2.75	6AD7G	3.35	6K7G	1.65	6ZY5G	2.25	12J7GT	2.05	25Y5	3.00	83	2.75
1LN5	2.75	6AF6G	2.75	6K7GT	1.65	7A4/XXL	1.80	12K7GT	1.65	27	1.50	83V	3.35
1N5GT	2.25	6AG5	2.75	6K8	2.75	7A5	2.05	12K8	2.50	25Z5	2.25	84/6Z4	1.80
1P5GT	2.75	6AG7	3.35	6K8G	2.50	7A6	1.80	12K8GT	2.50	25Z6	1.35	85	2.25
1Q5GT	2.75	6AH6	4.05	6K8GT	2.50	7A7	1.80	12Q7GT	1.80	25Z6GT	1.80	89Y	2.25
1R4	2.25	6AJ5	8.25	6L5G	2.75	7A8	1.80	12S8GT	2.75	26	1.50	117L7/M7GT	4.05
1R5	2.05	6AK5	4.05	6L6	3.70	7AD7	3.70	12SA7	1.65	30	2.05	117N7GT	4.05
1S4	2.50	6AK6	2.50	6L6G	3.00	7AF7	2.25	12SA7GT	1.65	31	2.75	117P7GT	4.05
1S5	1.80	6AL5	2.05	6L6GA	3.00	7AG7	2.25	12SC7	2.25	32	3.70	117Z3	1.50
1T4	2.05	6AL7GT	2.75	6L7	2.50	7AH7	2.25	123F5	1.80	32L7GT	3.35	117Z4GT	3.00
1T5GT	2.75	6AQ5	2.05	6L7G	3.00	7AJ7	1.80	12SF5GT	2.05	33	3.35	117Z6GT	2.50
				6N6G	4.05	7B4	1.80					FM1000	3.35

WE ARE SPECIALISTS FOR GARAGE EQUIPMENT

ELECTRIC MOTORS



DELCO

SPECIAL PURPOSE - SPLIT PHASE - SHORT HOUR - SOLID BASE MOTORS

H.P.	VOLTS	FREQUENCY	R.P.M.	SLEEVE BEARING SINGLE SHAFT MODEL NO.	LIST PRICE	BALL BEARING SINGLE SHAFT MODEL NO.	LIST PRICE	BALL BEARING DOUBLE SHAFT MODEL NO.	LIST PRICE
1/4	110	60 cycle	1740	M2470A1	17.80	M2570A1	22.30	M2570A2	22.80
	220	60 cycle	1740	M2474A1	19.35	M2574A1	23.85	M2574A2	24.35
1/3	110	60 cycle	1740	M2480A1	20.75	M2580A1	25.25	M2580A2	25.75
	220	60 cycle	1740	M2484A1	22.35	M2584A1	26.90	M2584A2	27.35
1/2	110	60 cycle	1740	M2490C1	25.05	M2590C1	29.55	M2590C2	30.05
	220	60 cycle	1740	M2494C1	26.65	M2594C1	31.20	M2594C2	31.65

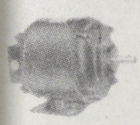
THE ABOVE "SPECIAL PURPOSE MOTORS" TO BE USED ONLY ON APPLICATIONS SUCH AS: HOME HOBBY TOOLS, INCLUDING DRILL PRESSES, LATHES, BENCH-SAWS, JOINERS, GRINDERS, SANDERS, etc., OR ANY OTHER SIMILAR APPLICATION.

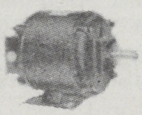
DELCO

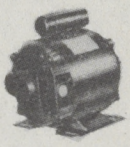
CONDENSER START — LONG HOUR MOTORS

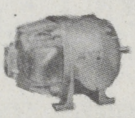
H.P.	VOLTS	FREQUENCY	R.P.M.	RUBBER MOUNTED MODEL NO.	LIST PRICE	SOLID BASE MODEL NO.	LIST PRICE
1/6	110	60 cycle	1740	M1660A2	23.70	M1660A1	22.95
	110/220	60 cycle	1740	M1662A2	25.25	M1662A1	24.50
1/5	110	60 cycle	1740	M1690A2	24.95	M1690A1	24.20
	110/220	60 cycle	1740	M1692A2	25.80	M1692A1	25.05
1/4	110	60 cycle	1740	M1670A2	25.90	M1670A1	25.15
	110/220	60 cycle	1740	M1672A2	27.40	M1672A1	26.65
1/3	110	60 cycle	1740	M1680A2	35.50	M1680A1	34.70
	110/220	60 cycle	1740	M1682A2	37.05	M1682A1	36.30

THE ABOVE "CONDENSER START MOTORS" TO BE USED ON APPLICATIONS SUCH AS: REFRIGERATORS, COMPRESSORS, CENTRIFUGAL AND RECIPROCATING PUMPS, AIR CONDITIONER UNITS, STOKERS, AND OTHER APPLICATIONS REQUIRING HIGH STARTING TORQUE.









WESTINGHOUSE

TYPE FJ SINGLE PHASE CAPACITOR START INDUCTION RUN

H.P.	VOLTS	FREQUENCY	R.P.M.	BALL BEARING MODEL NO	LIST PRICE	SLEEVE BEARING MODEL No.	LIST PRICE
1/2	110/220	60 cycle	1725	H47862	60.48	H47892	54.00
3/4	110/220	60 cycle	1725	H47826	75.60	H47828	69.66
1	110/220	60 cycle	1725	H53210	101.52	H53130	101.52

ELECTRIC MOTORS 1 H.P. CAPACITY AND LARGER ARE AVAILABLE IN BOTH FJ CAPACITATOR TYPE AND SQUIRREL CAGE INDUCTION 3 PHASE, 60 CYCLE, 220 and 550 VOLT. IF YOU ARE INTERESTED IN THESE, PLEASE WRITE FOR A MANUFACTURER'S CATALOGUE.

CONGRESS PULLEYS

"A" TYPE V GROOVED PULLEYS

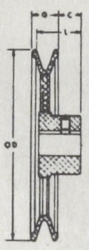
FOR "A" BELTS

TESTED FOR TRUE RUNNING
DIAMOND BORED
BRIGHT ELECTROPLATE FINISH

KEYWAY DATA

Pulleys from 2" to 16" diameter have keyways except ⅛" and ½" bores. ¾" bore in pulleys under 3" diameter are without keyways.
1/4" to 1/2" Bore—None
5/8" to 7/8" Bore—3/16 x 3/32 K.W.
15/16" to 1-1/4" Bore—1/4 x 1/8 K.W.
Special bores, special keyways and hollowhead setscrews furnished at small additional charge.





Outside Dia.	Pitch Dia.	List Price	STOCK BORES MARKED "X"								
			⅜"	½"	⅝"	¾"	⅞"	1"	1⅛"	1³⁄₁₆"	1¼"
1½"	1.35	$ .45	x	x	x						
2"	1.85	.55	x	x	x	x					
2¼"	2.10	.65	x	x	x	x					
2½"	2.35	.70	x	x	x	x					
2¾"	2.60	.80	x	x	x	x					
3"	2.85	.85	x	x	x	x	x	x			
3¼"	3.10	.95	x	x	x	x	x	x			
3½"	3.35	1.00	x	x	x	x	x	x			
3¾"	3.60	1.10	x	x	x	x	x	x			
4"	3.85	1.15	x	x	x	x	x	x			
4¼"	4.10	1.25	x	x	x	x	x	x			
4½"	4.35	1.35	x	x	x	x	x	x			
4¾"	4.60	1.45	x	x	x	x	x	x			
5"	4.85	1.50	x	x	x	x	x	x			
5¼"	5.10	1.65		x	x	x	x	x			
5½"	5.35	1.75		x	x	x	x	x			
6"	5.85	1.95		x	x	x	x	x	x	x	x
7"	6.85	2.50		x	x	x	x	x	x	x	x
8"	7.85	2.90		x	x	x	x	x	x	x	x
9"	8.85	3.60		x	x	x	x	x	x	x	x

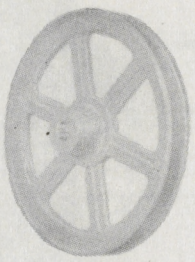
"B" TYPE V GROOVED PULLEYS

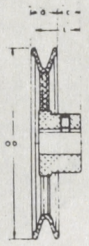
FOR "A" OR "B" BELTS

DIAMOND BORED
TESTED FOR TRUE RUNNING
BRIGHT ELECTROPLATE FINISH

KEYWAY DATA

All "B" pulleys have keyways except ⅛" bore.
5/8" to 7/8" Bore—3/16 x 3/32 K.W.
15/16" to 1-1/4" Bore—1/4 x 1/8 K.W.
1-3/8" to 1-3/4" Bore—3/8 x 3/16 K.W.
Special bores, special keyways and hollowhead setscrews furnished at small additional charge.





DIAMETER			List Price	STOCK BORES MARKED X									
Outside	Pitch "B"	Pitch "A"		½"	⅝"	¾"	⅞"	1"	1⅛"	1³⁄₁₆"	1¼"	1³⁄₈"	1½"
2½	2.20	1.9	$ .80	x	x	x							
3	2.70	2.4	.95	x	x	x	x	x					
3¼	2.95	2.7	1.05	x	x	x	x	x					
3½	3.20	2.9	1.10	x	x	x	x	x					
4	3.70	3.4	1.25	x	x	x	x	x					
4½	4.20	4.0	1.50	x	x	x	x	x					
5	4.70	4.4	1.70	x	x	x	x	x					
6	5.70	5.4	2.15	x	x	x	x	x	x	x	x		
7	6.70	6.4	2.70	x	x	x	x	x	x	x	x		
8	7.70	7.3	3.25	x	x	x	x	x	x	x	x		
9	8.70	8.3	3.90	x	x	x	x	x	x	x	x		
10	9.70	9.3	4.50	x	x	x	x	x	x	x	x		
12	11.70	11.3	5.90	x	x	x	x	x	x	x	x	x	x
14	13.70	13.3	7.25	x	x	x	x	x	x	x	x	x	x

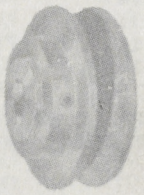
VARIABLE PITCH PULLEYS

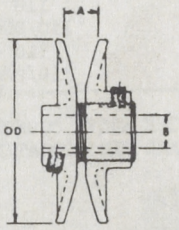
FOR USE WITH "A" AND "B" BELTS

Permit speed variations of approximately 30%. Ideal for air conditioning units, stokers and other installations where speeds must be changed or it is impossible to predetermine the correct speed.

KEYWAY DATA

Variable pitch pulleys of 1 2" bore have no keyways
5 8" Bore 3/16 x 3 32 K.W
3 4" Bore 3 16 x 3 32 K.W
1" Bore—1/4 x 1/8 K.W





Outside Dia.	List Price	MIN. AND MAX. PITCH DIAMETERS							
		"A" BELTS				"B" BELTS			
		Min. Pitch	Turns Open	Max. Pitch	Turns Open	Min. Pitch	Turns Open	Max. Pitch	Turns Open
3¼	$2.50	1.8	5	2.9	0	1.9	6	3.2	1
3½	2.75	2.0	5	3.1	0	2.2	6	3.5	1
4	3.00	2.6	5	3.6	0	2.8	6	3.9	1
4½	3.25	3.1	5	4.1	0	3.3	6	4.5	1



"V" STEP CONE PULLEYS

FOR A" BELTS

DIAMOND BORED
DESIGNED TO FIT THE BELT
BRIGHT ELECTROPLATE FINISH

KEYWAY DATA

5/8" to 7/8" Bore—3/16 x 3/32 K.W
15/16" to 1-1/4" Bore—1/4 x 1/8 K.W.

Size	List Price	OUTSIDE DIAMETER						STOCK BORES MARKED "X"							
		D_1	D_2	D_3	D_4	D_5	D_6	½	⅝	¾	⅞	1	1⅛	1³⁄₁₆	1¼
3"—2 Step†	$1.00	2	3					x	x						
3"—3 Step	1.50	1 15/16	2 9/16	3 3/8				x	x						
4"—3 Step	1.70	2	3	4				x	x	x					
4"—4 Step	2.30	2	2 5/8	3	4			x	x	x					
5"—3 Step	2.60	3	4	5				x	x	x		x*			
5"—4 Step	2.80	2	3	4	5			x	x	x					
6"—4 Step	4.00	3	4	5	6			x	x	x		x*			



WE SPECIALIZE IN IRON BARS

McCORD MOTOR GASKETS

Year	Model	Head Gasket	List Price	Motor Overhaul Set	List Price	Valve Grind Set	List Price	Manifold Set	List Price	Valve Cover Set	List Price	Oil Pan Set	List Price
Buick 8													
34-36	44	6037	1.95	....	.....	9029	4.60	SMS-309	1.00	CV-129	.90	CS-2308	1.35
37-40	44-45	6037	1.95	9261	11.20	9029	4.60	SMS-309	1.00	CV-129	.90	CS-2308	1.35
41-42	44-45 Single Carb. & Low Comp.	6037	1.95	9261	11.20	9427	3.70	SMS-309	1.00	CV-129	.90	CS-2308	1.35
41-42	44-45 Dual Carb.	6136	1.95	9262	11.45	9421	3.60	SMS-309	1.00	CV-129	.90	CS-2308	1.35
46-48	44-45	6136	1.95	9262	11.45	9460	3.70	SMS-309	1.00	CV-129	.90	CS-2308	1.35
36	46-48-49	5958	1.95	....	.....	9034	4.75	SMS-311	1.00	CV-131	1.00	CS-2293	1.50
37-40	46-47-48-49	5958	1.95	9263	11.05	9034	4.75	SMS-311	1.00	CV-131	1.00	CS-2293	1.50
41-42	46-47-49	6135	1.95	9264	12.10	9420	3.75	SMS-311	1.00	CV-131	1.00	CS-2293	1.50
41-42	46-47-49 Low Comp.	5958	1.95	....	.....	9508	4.93	SMS-311	1.00	CV-131	1.00	CS-2293	1.50
46-49	47	6135	1.95	9264	12.10	9500	3.80	SMS-311	1.00	CV-131	1.00	CS-2293	1.50
CHEVROLET 6													
29-31		5480B	.95	....	.....	9005	1.93	SMS-554	.55	CV-163	.70	CS-2184	.75
32		5480B	.95	....	.....	9005	1.93	SMS-554	.55	CV-163	.70	CS-2250	.75
33	Master	5480B	.95	....	.....	9008	1.93	SMS-554	.55	CV-163	.70	CS-2259	.75
33	Standard	S5796	1.16	....	.....	9007	2.15	SMS-554	.55	CV-163	.70	CS-2262	.75
34	Master	5839	1.05	....	.....	9012	2.25	SMS-555	.55	CV-170	.75	CS-2259	.75
34	Standard	S5828	1.16	....	.....	9013	2.15	SMS-555	.55	CV-163	.70	CS-2262	.75
35-36	Master	5870	1.10	9165	5.20	9017	2.65	SMS-555	.55	CV-170	.75	CS-2259	.75
35	Standard	5839	1.05	....	.....	....	....	SMS-555	.55	CV-170	.75	CS-2259	.75
35-36	Standard	5870	1.10	9165	5.20	9017	2.65	SMS-555	.55	CV-170	.75	CS-2259	.75
37-39		6134	1.10	9144	5.75	9019	2.90	SMS-2439	.55	CV-535	.75	CS-2298	.75
40-49		6134	1.10	9145	6.15	9019	2.90	SMS-2439	.55	CV-535	.75	CS-2373	.75
CHRYSLER 6													
34-35		5918A	2.20	....	.....	9023	4.46	MS-800	.99	CV-230	.90	CS-2181	.60
36		5918A	2.20	9109	5.39	9024	4.66	MS-800	.99	CV-181	.90	CS-2181	.60
37-42		6210	2.10	9108	6.25	9025	3.62	SMS-2443	.44	CV-537	.72	CS-2299	.70
46-49		6210	2.10	9273	6.60	9025	3.62	SMS-2443	.44	CV-537	.72	CS-2299	.70
CHRYSLER 8													
34-41	CQ-CU-CV-CZ, C1 to C33	6206	3.00	9268	7.25	9504	4.45	MS-801	1.00	CV-179	1.28	CS-2202	.70
42	C-36-C-37	6206	3.00	9268	7.25	9504	4.45	MS-801	1.00	CV-179	1.28	CS-2202	.70
46-49		6212	2.70	9110	8.20	9026	5.10	MS-801	1.00	CV-179	1.28	CS-2202	.70
DE SOTO 6													
34-35		5918A	2.20	....	.....	9023	4.46	MS-800	.99	CV-230	.90	CS-2181	.60
36		5918A	2.20	9109	5.39	9024	4.66	MS-800	.99	CV-181	.90	CS-2181	.60
37-42		6210	2.10	9108	6.25	9025	3.62	SMS-2443	.44	CV-537	.72	CS-2299	.70
46-49		6210	2.10	9273	6.60	9025	3.62	SMS-2443	.44	CV-537	.72	CS-2299	.70
DODGE 6													
33	(U.S. and Canada)	5766	1.90	....	.....	9006	3.39	SMS-2031	.40	CV-441	.40	CS-2255	.70
34-38	(to Engine No. C-1001 Canadian Models)	5766	1.90	....	.....	9006	3.39	SMS-2031	.40	CV-441	.40	CS-2255	.70
38-48	(Canadian Model)1938 after Eng. C1001; 1939-48 Same as Chrysler 6, 1938-48.												
49		6248	2.37	9280	8.10	9515	4.25	SMS-2031	.40	CV-441	.40	CS-2255	.70
FORD 4													
28-31	A	5571	1.10	9161	3.10	9001	2.15	MS-950	.22	CV-267	.26	CS-2173	.75
32	B	5737	1.16	....	.....	9002	1.70	MS-950	.22	CV-268	.17	CS-2248	.75
FORD V-8													
32-34	85 H.P.	5842B	.85	9087	5.45	9018	3.00	SMS-955	.28	CV-269	.70	CS-2249	.75
35-37	85 H.P. (21 stud)	5842B	.85	9087	5.45	9018	3.00	SMS-955	.28	CV-269	.70	CS-2283	.75
38-42	85-90 H.P. (24 stud)	6082	.75	9089	4.90	9412	3.00	SMS-955	.28	CV-269	.70	CS-2283	.75
46-48	100 H.P.	6043	.90	9088	4.10	9021	3.08	SMS-955	.28	CV-269	.70	CS-2283	.75
49	100 H.P. S-6244L or S-6244R	6043	.60	9276	5.20	9512	2.86	SMS-955	.28	CV-736	.65	CS-2423	.72
37-39	60 H.P.	5968	.80	9166	5.13	9020	2.48	SMS-2450	.28	CV-543	.65	CS-2305	.75
40	60 H.P.	5968	.80	9167	4.93	9020	2.48	SMS-2450	.28	CV-543	.65	CS-2372	.74
HUDSON 8													
34-35		5879A	2.45	....	.....	9037	6.58	MS-1129	3.01	CV-264	1.19	CS-2277	1.12
36		5936	2.66	....	.....	9038	7.14	MS-1129	3.01	CV-264	1.19	CS-2277	1.12
37		5963	3.50	9178	17.50	9039	7.84	SMS-2446	2.66	CV-264	1.19	CS-2277	1.12
38-47	(Standard Head)	5963	3.50	9178	17.50	9039	7.84	SMS-2446	2.66	CV-264	1.19	CS-2277	1.12
38	(High Comp. Head)	5936	2.66	....	.....	9040	6.86	SMS-2446	2.66	CV-264	1.19	CS-2277	1.12
48-49		5963	3.50	....	.....	9510	7.98	SMS-2446	2.66	CV-733	.90	CS-2418	1.40
HUDSON-TERRAPLANE 6													
34-36		5945	2.38	....	.....	9035	5.95	SMS-926	1.19	CV-263	.84	CS-2368	1.95
37-47		5962	2.66	9168	14.00	9036	5.95	SMS-2649	.77	CV-538	.91	CS-2368	1.95
48-49		6226	2.66	....	.....	9506	5.74	SMS-2680	1.47	CV-732	1.12	CS-2417	.63
KAISER 6													
47-49		6053	1.71	....	.....	9503	3.98	SMS-2673	.88	CV-282	.61	CS-2414	1.82
METEOR--Same as FORD 1949													
MERCURY V-8													
39-48	95-100 H.P.	6043	.90	9088	4.10	9021	3.08	SMS-955	.28	CV-269	.70	CS-2283	.75
49	100 H.P. S-6246R or S-6246L	1.38		9277	7.75	9511	3.85	SMS-2683	.61	CV-736	.65	CS-2423	.70
MONARCH--Same as MERCURY, 1946-49													

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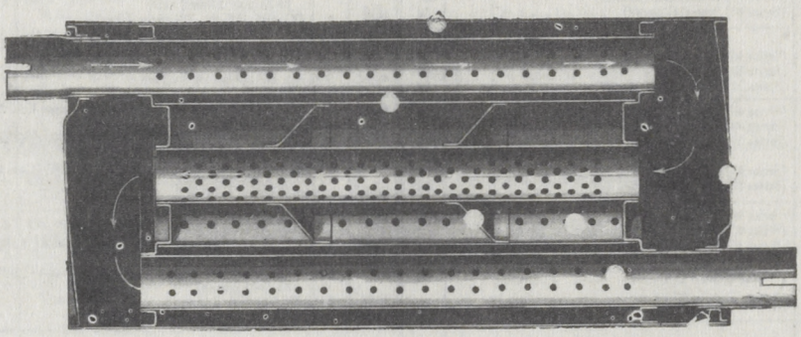
McCORD MOTOR GASKETS

Year	Model	Head Gasket	List Price	Motor Overhaul Set	List Price	Valve Grind Set	List Price	Manifold Set	List Price	Valve Cover Set	List Price	Oil Pan Set	List Price
NASH 6													
34-37	1220-3520-3620-3720	5831	3.15	....	....	....	....	MS-1740	1.35	CV-403	1.05	CS-2370	.99
35-36	3540-3640	5895	3.15	9179	7.05	9463	4.13	MS-1739	1.35	CV-401	.83	CS-2370	.99
38-39	3820-3920	6035	3.15	9181	9.75	9464	6.15	.....	....	CV-403	1.05	CS-2370	.99
40	4020	6035	3.15	9182	9.60	9464	6.15	.....	....	CV-403	1.05	CS-2370	.99
41-42	4140-4240 (600)	S-6164	2.10	9197	6.00	9466	3.06	.....	....	CV-693	.83	CS-2388	.90
41-42	4160-4260 (AMB.)	6165	3.15	9183	9.75	9465	5.25	.....	....	CV-403	1.05	CS-2370	.99
46-47	4640-4740 (600)	S-6221	1.73	9270	5.70	9501	2.70	.....	....	CV-693	.83	CS-2388	.90
48-49	4840-4940 (600)	S-6221	1.73	9270	5.70	9501	2.70	.....	....	CV-693	.83	CS-2420	1.16
46-49	4660 to 4960 (AMB.)	S-6222	3.15	9269	9.75	9502	5.25	.....	....	CV-403	1.05	CS-2370	.99
NASH 8													
34-37	1280-3780	5632A	3.63	....	.....	....	....	MS-1742	1.50	CV-613	1.20	CS-2214	1.73
38-40	3880-3980-4080	6036A	3.60	9184	11.10	9467	6.60	.....	....	CV-575	1.05	CS-2214	1.73
41-42	4180-4280	6036A	3.60	9185	11.10	9467	6.60	.....	....	CV-575	1.05	CS-2390	1.73
OLDSMOBILE 6													
34		5824	2.20	....	.....	9041	3.85	MS-2642	.70	CV-420	.60	CS-2280	.65
35-36		5883	1.75	9093	5.50	9042	3.85	MS-2642	.70	CV-420	.60	CS-2280	.65
37-48		6161	1.45	9169	6.05	9419	3.25	MS-2642	.70	CV-539	.55	CS-2303	.65
49		[illegible]	1.25	9281	6.48	9516	3.25	MS-4179	.22	CV-539	.55	CS-2303	.65
OLDSMOBILE 8													
32-34		5722	2.75	....	.....	9044	4.62	MS-2643	.95	CV-419	.80	CS-2252	.90
35-36		5891	2.20	....	.....	9045	4.70	MS-2643	.95	CV-419	.80	CS-2252	.90
37-48		6183	1.55	9170	7.80	9418	4.20	MS-2643	.95	CV-540	.80	CS-2304	.90
49		6240	1.00	....	.....	9418	4.20	MS-2685	3.05	CV-740	1.50	CS-2304	.90
PACKARD 6													
37		5951	1.88	....	.....	....	....	MS-2444	1.29	CV-532	.84	CS-2297	1.20
38		6034	2.55	....	.....	....	....	MS-2444	1.29	CV-532	.84	CS-2297	1.20
39-47		6034	2.55	9138	8.57	9416	4.73	SMS-2538	1.80	CV-532	.84	CS-2297	1.20
48-49		6225	2.55	....	.....	9509	5.03	SMS-2538	1.80	CV-532	.84	CS-2297	1.20
PACKARD 8													
38-47	1601-2, 1701-2, 1801-1A, 1901-1A, 2001-1A, 2101-11	6070	3.00	9139	8.81	9417	6.08	MS-1916	1.65	CV-425	.84	CS-2285	1.20
41-48	1903 to 08, 2003 to 08, 2023-55, 2103-06-26, 2206-13-26-33	6124	3.45	9140	11.72	....	....	MS-2644	3.30	CV-652	1.20	CS-2371	1.20
48-49	2201-02-11-22-32	6124	3.45	9271	10.95	9505	6.68	SMS-2676	1.44	CV-652	1.20	CS-2415	1.20
PLYMOUTH 4													
From Dec. 1928 to April 1932		5517A	1.50	....	.....	9010	3.62	MS-2452	.99	CV-440	.54	CS-2192	.60
Start April 1932		5517A	1.50	....	.....	9011	3.63	MS-2030	1.30	CV-440	.54	CS-2192	.60
PLYMOUTH 6													
33-34	(U.S. and Canada)												
35-38	(to Engine No. C-1001 Canadian Models)	5766	1.90	....	.....	9006	3.39	SMS-2031	.40	CV-441	.40	CS-2255	.70
38-48	(Canadian Models) 1938 after Eng. No. C-1001; 1939-48 Same as Chrysler 6, 1938-48												
49		6248	2.37	9280	8.10	9515	4.25	SMS-2031	.40	CV-441	.40	CS-2255	.70
PONTIAC 6													
35-36	(U.S. and Canada)	6132	1.45	....	.....	9422	2.25	MS-2055	.65	CV-447	.60	CS-2286	.75
37-40	(Canadian Models) Same as Chevrolet 6, 1937-40--(Except 1940 Series 25-26)												
40-48	(Canadian Models) Except 1940 Series 22												
49		6248	2.37	9280	8.10	9515	4.25	MS-2055	.65	CV-447	.60	CS-2286	.75
PONTIAC 8													
33-36		6025	1.60	....	.....	9048	2.90	MS-2054	.65	CV-446	.60	CS-2256	.75
37-49		6025	1.60	9173	6.85	9048	2.90	MS-2054	.65	CV-446	.60	CS-2256	.75
STUDEBAKER 6 CHAMPION													
39-40	C-2C	6079	1.43	9174	5.23	9411	2.07	MS-2554	.72	CV-623	.54	CS-2357	.68
41-49	3C to 8C	6079	1.43	9174	5.23	9411	2.07	MS-2645	.66	CV-623	.54	CS-2357	.68
STUDEBAKER 6 DICTATOR-COMMANDER													
36	3A-4A	5942A	1.82	....	.....	9429	2.59	MS-2218	.94	CV-593	.68	CS-2295	.74
37	5A-6A	5942A	1.82	....	.....	9429	2.59	MS-2442	.94	CV-593	.68	CS-2295	.74
38	7A-8A	6032	1.82	9175	5.92	9424	2.59	MS-2442	.94	CV-593	.68	CS-2295	.74
39-49	9A to 15A	6032	1.82	9175	5.92	9424	2.59	MS-2442	.94	CV-593	.68	CS-2295	.74
STUDEBAKER 8													
36-37	1C-2C-3C	5917	2.20	....	.....	....	....	MS-2215	1.93	CV-462	.95	CS-2193	1.15
38-42	4C to 8C	6033	2.20	9176	8.78	9423	3.71	MS-2215	1.93	CV-462	.95	CS-2325	1.05
WILLYS 4													
33-39	77	5182	1.65	9260	5.00	9409	2.65	SMS-2399	.44	CV-478	.27	CS-2270	.54
39-41	48-440-44-	S6080	.77	9177	3.51	9426	1.84	SMS-2399	.44	CV-478	.27	CS-2270	.54
	NOTE: In 1939 used on OVERLAND only.												
42	442	S6080	.77	9177	3.51	9426	1.84	SMS-2399	.44	CV-478	.27	CS-2398	.47
42-48	Jeep-Stn. Wagon	S6080	.77	9115	4.73	9434	2.50	SMS-2399	.44	CV-478	.27	CS-2398	.47

WE ARE SPECIALISTS FOR GARAGE EQUIPMENT

McCORD MUFFLERS

You can't tell much about a book or muffler from the cover..... IT'S THE "INSIDE STORY" THAT COUNTS



EXPANSION JOINTS

McCord Mufflers are built with an expansion joint at the point where the shell is joined to the header, an engineered feature of McCord mufflers which increases muffler life by permitting expansion and contraction. It also eliminates the crackling sounds which come from many mufflers when they cool.

FORMED HEADERS

Engineered design is evident in the formed headers of heavy gauge steel, shaped for extra strength. This construction makes McCord mufflers extra strong at a point of common weakness. A special flush type lock seam saves space (and advantage in making installation) and makes a stronger joint.

ROUND EXTRUDED NON-CLOGGING OPENINGS

McCord mufflers have round extruded openings because they have been found after many experiments, to eliminate whistling, make a quieter muffler, and give freedom from clogging by carbon which results from irregular shaped openings. Because these openings are self-cleaning McCord mufflers are quiet for the life of the muffler.

LOW FREQUENCY RESONATOR CHAMBER

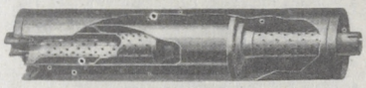
Here again Individual Engineering makes McCord a better, quieter muffler. The size of the chamber and number of extruded perforations in each muffler are engineered for one particular motor, the result is the low and intermediate frequency sounds are absorbed with minimum back pressure.

INTERMEDIATE SHELL

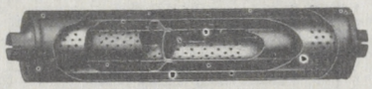
McCord Straight Thru, Round or Oval type mufflers all have an intermediate shell the same as the equipment mufflers. Individual Engineering through the use of this construction costs more, but because it results in much better control of high frequency sounds is worth it in making McCord a quieter muffler.

HIGH FREQUENCY RESONATOR CHAMBER

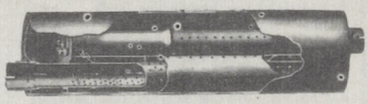
One of the reasons for the quietness of McCord mufflers is because the placing of the resonator rings is individual in each muffler number. No two McCord mufflers have the same spacing. This McCord policy of Individually engineering each muffler for one motor makes all McCord mufflers quiet.



STRAIGHT-THRU TYPE



SHELL TYPE



TRIPLE FLOW ROUND TYPE

PRICE LIST

McCord No.	List Each	McCord No.	List Each	McCord No.	List Each	McCord No.	List Each	McCord No.	List Each	McCord No.	List Each
1	10.55	40	8.45	93	11.95	169	12.70	226	29.50	340	9.65
5	13.80	41	8.45	103	12.10	188	8.25	227	24.25	342	12.45
6	7.95	42	6.00	109	15.90	189	11.95	228	19.45	343	7.75
7	8.25	44	5.60	110	10.25	191	18.30	235	21.20	344	7.70
8	8.60	50	10.45	113	7.75	192	19.80	236	25.25	345	9.75
9	8.75	60	5.70	114	7.70	193	16.10	237	14.35	346	9.75
10	9.00	63	10.40	116	10.40	200	10.90	238	23.85	347	9.75
17	8.25	66	11.30	123	11.15	201	13.35	239	25.75	350	12.70
23	10.80	68	14.30	125	11.05	211	13.45	240	21.20	353	9.50
28	5.60	69	15.80	127	14.40	212	13.45	241	21.20	354	11.95
29	5.60	72	8.25	133	9.65	213	13.45	301	9.30	355	14.65
30	8.45	73	8.80	136	9.50	215	14.70	305	9.75	361	15.20
31	8.45	81	10.50	140	17.55	217	15.50	307	9.75	363	8.45
32	8.45	84	17.15	142	11.95	218	22.90	308	24.40	364	10.20
33	8.45	85	9.35	143	6.40	219	24.80	309	9.75	366	13.70
34	8.45	86	5.35	152	7.60	220	6.60	311	8.10	368	28.70
35	8.45	87	14.65	154	8.10	221	18.30	314	8.25	369	12.00
36	5.60	88	21.65	157	4.50	224	27.30	315	7.75	370	12.10
38	5.60	90	11.95	158	7.15	225	11.80	334	24.10	539	10.30
39	8.45	92	11.95	162	10.85			339	11.95		

McCORD MUFFLERS

BUICK

Year	No. Cyl.	MODEL	McCord No.
1949	8	(Series 50) Super (Can. 45)	361
1949	8	(Series 70) Roadmaster (Can. 47)	361
48-49	8	(Series 40) Special (Can. 44)	68
46-47	8	(Series 40) Special (Can. 44)	68
46-48	8	(Series 50) Super (Can. 45)	68
46-48	8	(Series 70) Roadmaster (Can. 47)	68
1942	8	(Series 40) Special (With Single Carb.) (Can. 44)	68
1942	8	(Series 40) Special (With Dual Carb.) (Can. 44)	68
1942	8	(Series 50) Super (Can. 45)	68
1942	8	(Series 60) Century (Can. 46)	68
1942	8	(Series 70) Roadmaster (Can. 47)	68
41-42	8	(Series 90) Limited (Can. 49)	193
1941	8	(Series 40) Special (With Single Carb.) (Can. 42, 44)	68
1941	8	(Series 40) Special (With Dual Carb.) (Can. 42, 44)	68
1941	8	(Series 50) Super (Can. 45)	68
1941	8	(Series 60, 70) Century, Roadmaster (Can. 46, 47)	68
1940	8	(Series 40) Special (Can. 44)	68
1940	8	(Series 50) Super (Can. 45)	68
1940	8	(Series 60) Century (Can. 46)	68
1940	8	(Series 70) Roadmaster (Can. 47)	68
1940	8	(Series 80) Limited (Can. 48)	68
1940	8	(Series 90) Limited (Can. 49)	68
1939	8	(Series 40) Special (Can. 44)	68
1939	8	(Series 60) Century (Can. 46)	68
1939	8	(Series 80) Roadmaster (Can. 48)	68
1939	8	(Series 90) Limited (Can. 49)	68
1938	8	(Series 40) Special (Can. 44)	68
1938	8	(Series 60) Century (Can. 46)	68
1938	8	(Series 80) Roadmaster (Can. 48)	68
1938	8	(Series 90) Limited (Can. 49)	68
1937	8	(Series 40) Special (Can. 44)	68
1937	8	(Series 60) Century (Can. 46)	68
1937	8	(Series 80) Roadmaster (Can. 48)	68
1937	8	(Series 90) Limited (Can. 49)	68
1936	8	(Series 40) Special (Can. 44)	66
1936	8	(Series 60) Century (Can. 46)	127
1936	8	(Series 80) Roadmaster (Can. 48)	127
1936	8	(Series 90) Limited (Can. 49)	127
34-35	8	(Series 40) (Can. 44)	66
34-35	8	(Series 50) (Can. 45)	87
34-35	8	(Series 60) (Can. 46)	88
34-35	8	(Series 90)	88

CHEVROLET

Year	No. Cyl.	MODEL	McCord No.
1949	6	All Models Exc. Cabriolet (Can. 10-12)	363
1949	6	Cabriolet	364
1948	6	All Models Exc. Cabriolet (Can. 10-12)	41
1948	6	Cabriolet	41
46-47	6	All Models Exc. Cabriolet (Can. 10-12)	41
46-47	6	Cabriolet	41
41-42	6	AG, AH, BG, BH (Exc. Cabriolet) (Can. 10-12)	41
41-42	6	AH, BH Cabriolet	41
1940	6	KA, 85KB, KH (Exc. Cabriolet) (Can. 10-12 (85)	39
1940	6	KA Cabriolet	40
1939	6	JA, 85JB (Can. 10, 12)	35
37-38	6	GA, HA, GB, HB (Can. 10, 12 Exc. 7 Pass. 23)	35
1936	6	Standard FC (Can. 12)	34
35-36	6	Master EA, ED, FA, FD (Can. 10)	32
1935	6	Standard EC (Can. 12)	33
1934	6	Master DA (Can. 100)	31
1934	6	Standard DC (Can. 200)	38
1933	6	Master CA (Can. 100)	30
1933	6	Standard CC (Clamp on Type) (Can. 200)	28
1933	6	Standard CC (Equip. Dup.) (Can. 200)	29
29-32	6	Master AC, AD, AE, BA (Clamp on Type)	28
29-32	6	Master AC, AD, AE, BA (Pipe Thru Type) Equip. Dup	29

CHEVROLET TRUCK

Year	No. Cyl.	MODEL	McCord No.
47-49	6	EP, FP, GP (½ Ton); (Can. 13 Series)	42
47-49	6	ER, FR, GR (¾ Ton); (Can. 14 Series, 21-22-23-24)	42
47-49	6	ES, FS, GS (1 Ton Panel); (Can. 14 Series, 35 Panel)	42
47-49	6	ES, FS, GS (1 Ton Exc. Panel); (Can. 14 Series, 31-32-33-34)	42
47-49	6	QJ, QV, RJ, RV, SJ, SV (1½-2 Ton); (Can. 11, 15 Series)	42
47-49	6	QK, QW, RK, RW, SK, SW (1½-2 Ton)	42
47-49	6	QL, RL, SL (School Bus)	42
47-49	6	QP, QR, QS, RP, RR, RS, SP, SR, SS (2 Ton C.O.E.); (Can. 18 Series)	42
47-49	6	QR, QS, RR, RS, SR, SS (Vac. Shift 2 Speed Axle C.O.E.)	42
47-49	6	QX, RX, SX (School Bus)	42
1946	6	CK, DP (½ Ton); (Can. 13 Series)	42
1946	6	DR (¾ Ton); (Can. 14 Series, 21-22-23-24-25)	42
1946	6	OR, DS, PJ (1-1½ Ton Panel); (Can. 11-14 Series, 35 Panel)	42
1946	6	OR, DS, PJ (1-1½ Ton Exc. Panel); (Can. 11 Series	

CHEVROLET TRUCK (Continued)

Year	No. Cyl.	MODEL	McCord No.
1946	6	OE, OF, OS, PK, PV, PW (1½-2 Ton); (Can. 15 Series)	42
1946	6	OH, PP (2 Ton C.O.E.); (Can. 18 Series, 52-53)	42
1946	6	OI, OJ, PR, PS (2 Ton C.O.E.); (Can. 18 Series, 62-63-72-73, Exc. 2 Speed Axle)	42
1946	6	OG, OW, OY, PL, PX (School Bus)	42
1946	6	PP, PR, PU, PW (Vac. Shift 2 Speed Axle); (Can. 18 Series, 62-63-72-73, With 2 Speed Axle)	42
41-42	6	AG, BG (Sedan Delivery)	41
41-42	6	AK, BK (½ Ton) (Can. 13 Series)	42
41-42	6	AL, AM, BL, BM (¾ Ton) (Can. 14 Series Exc. 35 Panel)	42
41-42	6	AN, BN, MR, YR, ("U" Panel) (1-1½ Ton) (Can. 14, 15 Series, 35 Panel)	42
41-42	6	BN, MR, YR, (Cab, Express) (1-1½ Ton) (Can. 15 Series Exc. 35 Panel)	42
41-42	6	MS, YS (Exc. Flat Back Cowl) (1½ Ton)	42
41-42	6	MT, MY, YS, YT (School Bus)	42
41-42	6	MU, YU (C.O.E.) (Can. 18 Series, 52-53)	42
41-42	6	MV, MW, YV, YW (C.O.E.) (Can. 18 Series, 62-63-72-73)	42
41-42	6	G4105-13,52-62-63-65-74; G7105-6-7-13-16-17-23-27-33-63-73 (Army)	42
1941	6	YP, YQ, G4112 (Army)	42
1941	6	YR4103-4-5-7-9-12, YS4409 (Army)	42

CHRYSLER

Year	No. Cyl.	MODEL	McCord No.
1949	6	C45 4 Door Sedan & Club Coupe	366
1949	6	C45 Conv. Coupe	367
1949	6	C45 Station Wagon	366
1949	6	C45 7 Pass. & Limo. (With Exh. Pipe Attached)	235
1949	8	C46 Club Coupe & 4 Door Sedan	368
1949	8	C46 Conv. Coupe (Front with Conn. Pipe)	236
1949	8	C46 Conv. Coupe (Rear with Conn. Pipe)	237
1949	8	C47 Imperial (Front with Conn. Pipe)	238
1949	8	C47 Imperial (Rear with Conn. Pipe)	239
42-48	6	C34-C38, Royal and Windsor (Exc. Conv. Coupe and 7 Pass.)	110
42-48	6	C34-C38, Royal and Windsor (Conv. Coupe)	110
42-48	6	C34-C38, Royal and Windsor (7 Pass.) (With Exhaust Pipe Attached)	227
42-48	6	C34-C38, Royal and Windsor (7 Pass.) (Muffler Only)	110
42-48	8	C39, New Yorker and Saratoga (Exc. Conv. Coupe)	308
42-48	8	C39, New Yorker and Saratoga (Conv. Coupe) (Front)	334
46-48	8	C39, New Yorker and Saratoga (Conv. Coupe) (Rear with Conn. Pipe)	225
46-48	8	C40, Crown Imperial (Front with Conn. Pipe)	224
46-48	8	C40, Crown Imperial (Rear with Conn. Pipe)	226
1942	8	C36, New Yorker and Saratoga (Conv. Coupe) (Front)	334
1942	8	C36, New Yorker and Sataoga (Conv. Coupe) (Rear with Conn. Pipe)	225
1942	8	C37, Crown Imperial (Front with Conn. Pipe)	224
1942	8	C37, Crown Imperial (Rear with Conn. Pipe)	226
1941	6	C28, Royal and Windsor (Exc. Conv. Coupe and 7 Pass.)	110
1941	6	Canada C28, Royal and Windsor (Exc. Conv. Coupe and 7 Pass.	110
1941	6	C28, Royal and Windsor (7 Pass.) (With Exhaust Pipe Attached)	217
1941	6	C28, Royal and Windsor (Conv. Coupe) (Muffler Only)	110
1941	8	C30, New Yorker and Saratoga (Exc. Conv. Coupe) (Muffler Only)	192
1941	8	C30, New Yorker and Saratoga (Conv. Coupe) (Front Muffler)	191
1941	8	C30, New Yorker and Saratoga (Conv. Coupe) (Rear with Conn. Pipe)	220
1941	8	C33, Crown Imperial (Front Muffler)	219
1941	8	C33, Crown Imperial (Rear Muffler with Conn. Pipe)	218
1940	6	C25, Royal and Windsor (Exc. 7 Pass.)	110
1940	6	C25, Royal and Windsor (7 Pass.)	110
1940	8	C26, Traveler, Saratoga and New Yorker	192
1940	8	C27, Crown Imperial (Front Muffler)	192
1940	8	C27, Crown Imperial (Rear Muffler with Conn. Pipe)	215
1939	6	C22, Royal and DeLuxe Windsor (Exc. 7 Pass.)	110
1939	6	C22, Royal and DeLuxe Windsor (7 Pass.)	110
38-39	8	C19, Imperial; C23, Imperial, Saratoga and New Yorker	109
38-39	8	C20-C24, Custom Imperial	140
1938	6	C18, Royal (Exc. 7 Pass.)	110
1938	6	C18, Royal (7 Pass.)	110
1937	6	C16, Royal (Exc. 7 Pass.) (Muffler Only)	85
1937	6	C16, Royal (Exc. 7 Pass.) (Exhaust Pipe Attached)	84
1937	6	C16, Royal (7 Pass.) (Muffler Only)	85
1937	6	C16, Royal (7 Pass.) (With Exhaust Pipe Attached)	84
1937	8	C14, Imperial (Muffler Only)	85
1937	8	C15, Custom Imperial	140
1937	8	C17, Airflow	83
1937	8	Canada C17, Airflow	109
1936	6	C7, Airstream (Exc. 7 Pass.)	85
1936	6	C7, Airstream (7 Pass.)	85
1936	8	C8, DeLuxe (Exc. 7 Pass.)	85
1936	8	C8, DeLuxe (7 Pass.)	85
1936	8	C9, C10, C11, Airflow	83
1936	8	Canada C9, C10, C11, Airflow	109
1935	6	C6, Airstream (Muffler Only)	103
1935	8	CW	124
1935	8	CZ, Airstream (Muffler Only)	103
1935	8	C1, Airflow	83
1935	8	C2, Airflow Imperial to Ser. 7,013,580	124
1935	8	C2, Airflow Imperial after Ser. 7,013,580	83
1935	8	C3, Airflow Custom Imperial to Ser. 7,528,614	124
1935	8	C3, Airflow Custom Imperial after Ser. 7,528,614	83

DE SOTO

Year	No. Cyl.	MODEL	McCord No.
1949	6	S13 Conv. Coupe	369
1949	6	S13 4-Door Sedan & Club Coupe	366
1949	6	S13 Station Wagon	366
1949	6	S13 7 Pass. & Limo. (With Exh. Pipe Attached)	240

DE SOTO (Continued)

Year	No. Cyl.	MODEL	McCord No.
42-48	6	S10-S11, Custom and DeLuxe (Exc. Conv. Coupe and 7 Pass.)	110
42-48	6	S10-S11, Custom and DeLuxe (Conv. Coupe)	110
42-48	6	S10-S11, Custom and DeLuxe (7 Pass.) (With Exhaust Pipe Attached)	227
42-48	6	S10-S11, Custom and DeLuxe (7 Pass.) (Muffler only)	110
1941	6	S8, Custom and DeLuxe (Exc. Conv. Coupe and 7 Pass.)	110
1941	6	Canada S8 (Exc. Conv. Coupe and 7 Pass.)	110
1941	6	S8, Custom and DeLuxe (7 Pass.) (With Exhaust Pipe Attached)	217
1941	6	S8, Custom and DeLuxe (Conv. Coupe)	110
1940	6	S7, Custom and DeLuxe (Exc. 7 Pass.)	110
1940	6	S7, Custom and DeLuxe (7 Pass.)	110
1939	6	S6, Custom and DeLuxe (Exc. 7 Pass.)	110
1939	6	S6, Custom and DeLuxe (7 Pass.)	110
1938	6	S5, Custom and Standard (Exc. 7 Pass.)	110
1938	6	S5, Custom and Standard (7 Pass.)	110
1937	6	S3, Custom and Standard (Exc. 7 Pass.) (Muffler only)	85
1937	6	S3, Custom and Standard (Exc. 7 Pass.) (With Exh. Pipe Attached)	84
1937	6	S3, Custom and Standard (7 Pass.) (Muffler only)	85
1937	6	S3, Custom and Standard (7 Pass.) (With Exhaust Pipe Attached)	84
1936	6	S1, Airstream (Exc. 7 Pass.)	85
1936	6	S1, Airstream (7 Pass.)	85
1936	6	S2, Airflow (Muffler only)	85
35-36	6	Can. SF, Airstream; S1, Custom Airstream (7 Pass.)	85
1935	6	SF, Airstream (Early) (Muffler only)	103
1935	6	SF, Airstream (Late) (Muffler only)	103
1935	6	Canada SF (Exc. 7 Pass. and Taxi)	85
1935	6	SG, Airflow (Muffler only)	103

DODGE

Year	No. Cyl.	MODEL	McCord No.
1949	6	D29 (Exc. Roadster)	366
1949	6	D29 Roadster	370
1949	6	D30 Conv. Coupe	369
1949	6	D30 Club Coupe & 4 Door Sedan	366
1949	6	D30 Station Wagon	366
1949	6	D30 7 Pass. & Limo. (With Exh. Pipe Attached)	241
42-48	6	D22, D24, Custom and DeLuxe (Exc. Conv. Coupe and 7 Pass.)	110
42-48	6	D22, D24, Custom and DeLuxe (Conv. Coupe)	110
42-48	6	D22, D24, Custom (7 Pass.) (With Exhaust Pipe Attached)	228
42-48	6	D22, D24, Custom and DeLuxe (7 Pass.) (Muffler only)	110
42-48	6	Canada D22, D24 (Exc. Conv. Coupe and 7 Pass.)	110
42-48	6	Canada D22, D24 (Conv. Coupe)	110
42-48	6	Canada D22, D24 (7 Pass.) (With Exhaust Pipe Attached)	227
42-48	6	Canada D22, D24 (7 Pass.) (Muffler only)	110
42-48	6	Canada D23, D25 (Exc. Conv. Coupe)	110
42-48	6	Canada D23, D25 (Conv. Coupe)	110
1941	6	D19, Custom and DeLuxe (Exc. Conv. Coupe and 7 Pass.)	110
1941	6	D19, Custom and DeLuxe (Conv. Coupe)	110
1941	6	D19, Custom (7 Pass.) (With Exh. Pipe Attached)	221
1941	6	Canada D19, Luxury Liner (Exc. Conv. Coupe and 7 Pass.)	110
1941	6	Canada D19, Luxury Liner (Conv. Coupe)	110
1941	6	Canada D19, Luxury Liner(7 Pass.) (With Exh. Pipe Attached)	221
1941	6	Canada D20, Kingsway	157
1941	6	Canada D21, DeLuxe (Exc. 7 Pass.)	158
1941	6	Canada D21, DeLuxe (7 Pass.)	158
1940	6	D14, D17, DeLuxe and Special (Exc. 7 Pass.)	110
1940	6	D14, D17, DeLuxe (7 Pass.)	110
1940	6	Canada D14, Custom (Exc. 7 Pass.) (Muffler only)	110
1940	6	Canada D14, Custom (7 Pass.) (Muffler only)	110
1940	6	Canada D15, Kingsway (Muffler only)	157
1940	6	Canada D16, DeLuxe, Spec. DeLuxe (Exc. 7 Pass.)	158
1940	6	Canada D16, DeLuxe, Spec. DeLuxe (7 Pass.)	158
1939	6	D11, DeLuxe and Special (Exc. 7 Pass.)	110
1939	6	D11, DeLuxe (7 Pass.)	110
1939	6	Canada D11 (Exc. 7 Pass.) (Muffler only)	110
1939	6	Canada D11 (7 Pass.) (Muffler only)	110
1939	6	Canada D12 (Exc. 7 Pass.) (Muffler only)	86
1939	6	Canada D13, DeLuxe, Spec. DeLuxe (Muffler only)	136
37-38	6	D5, D8 (Exc. 7 Pass.) (Muffler only)	85
37-38	6	D5, D8 (Exc. 7 Pass.) (With Exh. Pipe Attached)	69
37-38	6	D5, D8 (7 Pass.) (Muffler only)	85
37-38	6	D5, D8 (7 Pass.) (With Exh. Pipe Attached)	69
1938	6	Canada D8, Custom, After Eng. No. C1001 (Muffler only)	85
1938	6	Canada D9, After Eng. No. C1001 (Muffler only)	86
37-38	6	Canada D5, D8, Custom, To Eng. No. C1001 (Exc. 7 Pass.) (Muffler only)	85
37-38	6	Canada D5, D8, Custom, To Eng. No. C1001 (7 Pass.) (Muffler only)	85
37-38	6	Canada D6, All; D9 to Eng. No. C1001 (Muffler only)	60
37-38	6	Canada D7, DeLuxe, D10 (Muffler only)	136
1936	6	D2 (Exc. 7 Pass.)	85
1936	6	D2 (7 Pass.)	85
1936	6	Canada D2 (Exc. 7 Pass.)	85
1936	6	Canada D2 (7 Pass.)	85
1936	6	Canada D3	60
1936	6	Canada D4, DeLuxe	136
1935	6	DU (To Serial 3,784,901) (Muffler only)	103
1935	6	DU (To Serial 3,784,901) (With Exh. Pipe Attached)	65
1935	6	DU (After Serial 3,784,901) (Muffler only)	103
1935	6	DU (After Serial 3,784,901) (With Exh. Pipe Attached)	65
1935	6	Canada DU (Exc. 7 Pass. and Cab. Sedan) (Muffler only)	85

IT IS A PLEASURE TO SERVE YOU

McCORD MUFFLERS

DODGE TRUCK

Year	No. Cyl.	MODEL	McCord No.	MUFFLER
1948	6	DE1, DE2 (½-1 Ton)	86	
1948	6	DE3, DE4 (1½-2 Ton)	86	
1948	6	DE6 (3 Ton)	152	
41-47	6	DC3, DC4, DD3, DD4 (Express) (1½-2 Ton)	86	
40-47	6	DB1, DC1, DD1 (Except Panel) (½ Ton)	86	
40-47	6	DB1, DC1, DD1 (Panel) (½ Ton)	86	
40-47	6	DB2, DC2, DD2 (¾-1 Ton)	86	
40-47	6	DB3, DB4, DC3, DC4, DD3, DD4 (Except Express on 133" and 135" W.B.) (1½-2 Ton)	86	
40-47	6	DBM3, DBM4, DCM3, DCM4, DDM3, DDM4 (1½-2-2½ Ton)	86	
40-47	6	DB6, DC5, DC6, DD5, DD6 (2½-3 Ton)	86	
40-47	6	DB7, DC7, DCM7, DD7, DD7S, DDM7 (3-5 Ton)	152	
1940	6	DB3, DB4 (Express) (1½-2 Ton)	86	
1939	6	TC (Except Panel) (½ Ton)	86	
1939	6	TC (Panel) (½ Ton)	86	
1939	6	TD (¾-1 Ton)	86	
1939	6	TE, TF (Except Express) (1½-2 Ton)	86	
1939	6	TE (Express) (1½ Ton)	86	
1939	6	TH (3 Ton)	152	
1938	6	RC (Express) (½ Ton)	86	
1938	6	RC (Suburban) (½ Ton)	86	
1938	6	RC (Except Express and Suburban) (½ Ton)	86	
1938	6	RD20, RD21 (¾-1 Ton)	86	
1938	6	RE31, RE32 (Express) (1½ Ton)	86	
1938	6	RE31, RE32, RF36, RF37 (Except Express) (1½-2 Ton)	86	
1938	6	RH45, RH47, RH48 (3 Ton)	152	

FORD

1949	6	8HA, 95 H.P. (Exc. Conv. Coupe and Sta. Wagon)	345	
1949	6	8HA, 95 H.P. (Conv. Coupe)	345	
1949	6	8HA, 95 H.P. (Sta. Wagon)	345	
1949	8	8BA, 100 H. P. (Exc. Conv. Coupe and Sta. Wagon) (Canada 8A Ford, C84M Meteor, 114" W.B.)	345	
1949	8	8BA, 100 H.P. (Conv. Coupe)	345	
1949	8	8BA, 100 H.P. (Sta. Wagon)	345	
47-48	6	7GA-7HA, 90 H.P., Special, DeLuxe andSuper DeLuxe(Exc.Sta.Wagon)	305	
47-48	6	7GA-7HA, 90 H.P., Special, DeLuxe and Super DeLuxe (Sta. Wagon)	305	
47-48	8	79A-89A, 100 H.P., DeLuxe and Super DeLuxe (Exc. Sta. Wagon)	305	
47-48	8	79A-89A, 100 H.P., DeLuxe and Super DeLuxe (Sta. Wagon)	305	
47-48	8	Canada 51A DeLuxe and Super DeLuxe, 114" W.B., (Exc. Sta. Wagon)	305	
47-48	8	Canada 51A DeLuxe and Super DeLuxe, 114" W.B. (Sta. Wagon)	305	
42-46	6	2GA, (Late Models with 5" Round Mufflers) 6GA	307	
42-46	8	21A, 69A	305	
1942	6	2GA, (Early Models with Oval Mufflers)	•305	
1941	6	1GA, 90 H.P.	309	
1941	8	11A, 90 H.P. (Exact Duplicate of Car Factory Equipment Muffler)	188	
1941	8	11A, 90 H.P. (Exact Duplicate of Car Factory Service Muffler)	9	
1940	8	01A, 85 H.P.	17	
39-40	8	922A, 022A, 60 H.P.	10	
1939	8	91A DeLuxe, 85 H.P.	17	
1939	8	91A Standard, 85 H.P.	17	
37-38	8	78-81A, 85 H.P.	7	
37-38	8	74 Late with 14" Shell Muffler; 82A, 60 H.P.	10	
1937	8	74 Early with 17" Shell Muffler, 60 H.P.	7	
35-36	8	48, 68	7	
33-34	8	40, 46 (Muffler Only)	8	
33-34	8	40 (With Exh. Pipe Attached)	5	
1932	8	18 (Muffler Only)	6	
28-31	4	"A" (With Exh. and Tail Pipes Welded to Round Shell Muffler)	1	

FORD TRUCK

48-49	8	C (114" W.B.) (½ Ton)	346	
48-49	8	D, Y (122" W.B.) (¾ Ton)	346	
48-49	8	TH, W, WH, TL, T (Exc. Bus) (110" 134", 158" W.B.) (1-1½-2 Ton)	346	
48-49	8	T (Bus) (194" W.B.)	346	
48-49	8	Q, QH (135", 159", 195" W.B.) (2½-3 Ton)	347	
1948	8	(Canada) F47, M47 (Exc. Panel) (114" W.B.) (½ Ton)	346	
1948	8	(Canada) F47, M47 (Panel) (114" W.B.) (½ Ton)	346	
1948	8	(Canada) F68, M68 (122" W.B.) (1 Ton)	346	
1948	8	(Canada) F105, M105, F135, M135, F155, M155 (134", 158", 176" W.B.) (1½-2-3 Ton)	346	
1948	8	(Canada) F155, M155 (194" W.B.) (3 Ton)	346	
1948	8	(Canada) F135, F155 (110" W.B.) (2-3 Ton)	346	
46-47	8	69C (114" W.B.) (Platform and Pick-up) (½ Ton)	315	

FORD TRUCK (Continued)

Year	No. Cyl.	MODEL	McCord No.	MUFFLER
46-47	8	69T, 69U, 69W (134" W.B.) (1½ Ton)	314	
46-47	8	69Y (122" W.B.) (1 Ton)	315	
46-47	8	691W (101" W.B.) (1½ Ton)	314	
46-47	8	698T, 698W (158" W.B.) 694T (194" W.B.) (1½ Ton)	314	
42-44	8	21C, 29C (Exc. Panel) (114" W.B.) (½ Ton)	315	
42-44	8	21C, 29C (Panel) (114" W.B.) (½ Ton)	315	
42-44	8	21D, 29D, 21Y, 29Y (122" W.B.) (¾-1 Ton)	315	
42-44	8	21T, 29T (Exc. Panel) (134" W.B.)	314	
42-44	8	21T, 29T (Panel) (134" W.B.) (¾-1 Ton)	314	
42-44	8	21U, 29U, 21W, 29W (134" W.B.) 1½ Ton)	314	
42-44	8	29B, 49B (Bus) (148½" W.B.)	337	
42-44	8	211W, 291W (101" W.B.) (1½ Ton)	314	
42-44	8	214T, 294T, 494T (Bus) (194" W.B.)	314	
42-44	8	218T, 218W (158" W.B.) (1½ Ton)	314	
42-44	8	298T, 298 W, 498T (158"W .B.) (1½ Ton	314	
1941	8	11C (Exc. 83 Pick-up) (112" W.B.) (½ Ton)	18	
1941	8	11C83 (Pick-up) (112" W.B.) (½ Ton)	18	
1941	8	11D, 11Y, 19D, 19Y (122" W.B.) (¾-1 Ton)	18	
1941	8	11T (Exc. Panel) (134" W.B.) (1½ Ton)	18	
1941	8	11T82 (Panel) (134" W.B.) (1½ Ton)	18	
1941	8	11U, 19T, 19U (134" W.B.) (1½ Ton)	18	
1941	8	11W, 19W (134" W.B.) (1½ Ton)	18	
1941	8	19B (Bus) (148½" W.B.)	337	
1941	8	19C (112" W.B.) (½ Ton)	18	
1941	8	111W (101" W.B.) (1½ Ton)	18	
1941	8	114T, (194" W.B.), 118W (158" W.B.) (1½ Ton)	18	
1941	8	118T (Exc. Panel) (158" W.B.) (1½ Ton)	18	
1941	8	118T (Panel) (158" W.B.) (1½ Ton)	18	
1941	8	191W (101" W.B.), 194T, (194" W.B.) (1½ Ton)	18	
1941	8	198T (158" W.B.) (1½ Ton)	18	
1941	8	198W (158" W.B.) (1½ Ton)	18	
1940	8	01C (Exc. Pick-up) (112" W.B.) (½ Ton)	17	
1940	8	01C83 (Pick-up) (112" W.B.) (½ Ton)	17	
1940	8	01D, 01Y, 09D, 09Y (122" W.B.) (¾-1 Ton)	18	
1940	8	01T (Exc. Panel) (134" W.B.) (1½ Ton)	18	
1940	8	01T82 (Panel) (134" W.B.) (1½ Ton)	18	
1940	8	01U (134" W.B.) (1½ Ton)	18	
1940	8	01W (134" W.B.) (1½ Ton)	18	
1940	8	09B (Bus) (148½" W.B.)	337	
1940	8	09C (112" W.B.) (½ Ton)	17	
1940	8	09T, 09U (134" W.B.) (1½ Ton)	18	
1940	8	09W (134" W.B.) (1½ Ton)	18	
1940	8	011W (101" W.B.) (1½ Ton)	18	
1940	8	014T, 018W (158", 194" W.B.) (1½ Ton)	18	
1940	8	018T (Exc. Panel) (158" W.B.) (1½ Ton)	18	
1940	8	018T (Panel) (158" W.B.) (1½ Ton)	18	
1940	8	022C (112" W.B.) (½ Ton)	10	

G. M. C. TRUCK

1948	6	91 Series (1½ Ton)	42	
1948	6	93 Series (½ Ton)	42	
1948	6	94 Series (21-22-23-24-25) (¾-1 Ton)	42	
1948	6	94 Series (31-32-33-34) (1 Ton)	42	
1948	6	94 Series (35) (1 Ton)	42	
1948	6	95 Series (2 Ton)	42	
1948	6	96 Series (2½ Ton)	42	
1948	6	97 Series (3 Ton)	116	
1948	6	98 Series (52-53) (Exc. 2 Speed Axle) (2 Ton)	42	
1948	6	98 Series (52-53) (With 2 Speed Axle) (2 Ton)	42	
1948	6	98 Series (62-63-72-73) (2 Ton)	42	
46-47	6	91 Series (Exc. 35) (1½ Ton)	42	
46-47	6	91 Series (35) (1½ Ton)	42	
46-47	6	93 Series (½ Ton)	42	
46-47	6	94 Series (21-22-23-24-25) (1 Ton)	42	
46-47	6	94 Series (31-32-33-34) (1 Ton)	42	
46-47	6	94 Series (35) (1 Ton)	42	
46-47	6	95 Series (Exc. 2 Speed Axle) (2 Ton)	42	
46-47	6	95 Series (2 Speed Axle) (2 Ton)	42	
46-47	6	96 Series (2½ Ton)	42	
46-47	6	97 Series (3 Ton)	116	
46-47	6	98 Series (52-53) (Exc. 2 Speed Axle) (2 Ton)	42	
46-47	6	98 Series (62-63-72-73) (Exc. 2 Speed Axle) (2 Ton)	42	
46-47	6	98 Series (2 Speed Axle) (2 Ton)	42	
41-45	6	93 Series (½ Ton)	42	
41-45	6	94 Series (Except 35 Panel) (1 Ton)	42	
41-45	6	95 Series (Except 35 Panel) (2 Ton)	42	
41-45	6	94; 95 Series (35 Panel) (1-2 Ton)	42	
41-45	6	96 Series (2½ Ton)	42	
41-45	6	97 Series (3 Ton)	116	
41-45	6	98 Series (52-53) (2 Ton)	42	
41-45	6	98 Series (Except 52-53) (2 Ton)	42	
1940	6	93 Series (½ Ton)	45* 44* 36*	
1940	6	94 Series (21, 22, 23); 95 Series (Except 35); 96 Series	45*	

G. M. C. TRUCK (Continued)

Year	No. Cyl.	MODEL	McCord No.	MUFFLER
1940	6	94 Series (24) (1 Ton)	45* 44* 36*	
1940	6	94 Series (25) (1 Ton)	45* 44* 36*	
1940	6	95 Series (35 Panel) (2 Ton)	45* 44*	
1940	6	96H Series (3 Ton)	116	
1940	6	98 Series (52, 53) (2½ Ton)	36* 45* 44*	
1940	6	98 Series (62, 63, 72, 73) (2½ Ton)	36* 45* 44*	
1939	6	94, 95 Series (35 Panel) (¾-1½ Ton)	36* 45* 44*	
1939	6	98 Series (52, 53) (1½-2 Ton)	36* 45* 44*	
1939	6	98 Series (63) (1½-2 Ton)	36* 45* 44*	
38-39	6	93 Series (½ Ton)	36* 45* 44*	
38-39	6	94, 95 Series (Except 35); 96 Series (All) (¾-2½ Ton)	36* 45* 44*	

INTERNATIONAL TRUCK

47-49	6	KB1, KB1M, KB2, KB3, KB3M	143	
47-49	6	KB5, KBS5	143	
47-49	6	KB6, KBS6, KBS6T, KB6F, KBS6B, KB7, KBS7 (With BLD Engine)	311	
47-49	6	K7, KB7 (With RED Engine)	350	
47-49	6	KB8, KB8F, KB11F, KB8T, KBR8T, KBS8T, KB10, KBR8, KBS8, KBR10, KBS10, KBR11, KBR11F, KBR11T, KBS11, KBS11T	350	
41-47	6	K1, K2 (125" W.B.)	143	
41-47	6	K1, K3 (113" W.B.)	143	
41-47	6	K3 (130" W.B.)	143	
41-47	6	K4, KS4, K5, KS5	143	
41-47	6	K6B, KS6B	311	
41-47	6	K6, K6F, K6T, KS6, KS6T, K7, KS7 (With FAC and BLD Engines)	311	
41-47	6	K7, KS7 (With FBC 318 Engine); K8, KR8, KS8, K10, KR10, KS10, KR11, KS11	169	
41-47	6	K7-KS7 (C.O.E.) (To FAC 259-A-751)	154	
41-47	6	K7-KS7 (C.O.E.) (After FAC 259A-751; After BLD 269A-501)	311	
37-41	6	D1, D2 Station Wagon, D2M, D3, D5M, D15M	143	
37-41	6	D2 (Except Station Wagon), D5	143	
37-41	6	D15 (Tail Pipe No. 1482 fits 113" W.B. only)	143	
37-41	6	D29, D30, D30B, DS30	143	
37-41	6	D35, DH35, DS35	154	
37-41	6	D35B, D39, D40, DS40	154	
37-41	6	D50, DR50, DS50, D60, DR60	169	
37-41	6	DR70, D246F, D246T, DR246T, DS246T, D346F, D346T, DR346T	169	
37-41	6	D186T, DS186T	143	
37-41	6	D216F, D216T, DS216T	154	
37-41	6	D300, DS300	143	
37-41	6	D390, DS390, D400, DS400	154	
37-41	6	DR426F, D500, DR500, DS500, DR700	169	

LAFAYETTE

39-40	6	3910 to 3919, 4010 to 4018	93
1938	6	3810 to 3818	93
1937	6	3710 to 3718	90
34-36	6	110 to 116, 3510 to 3518, 3610 to 3618	90

MAPLE LEAF TRUCK

45-48	6	16 Series (2½ Ton)	42	
45-49	6	17 Series (3 Ton)	116	
41-42	6	16 Series (2½ Ton)	42	
41-42	6	17 Series (3 Ton)	116	
1940	6	16 Series (2½ Ton)	36* 45* 44*	
1940	6	16H Series (3 Ton)	116	
38-39	6	16 Series (2½ Ton)	36* 45* 44*	
1938	6	17 (52, 53) (2½ Ton)	36* 45* 44*	
1938	6	17 (62, 63, 72, 73) (2½ Ton)	36* 45* 44*	
1937	6	HL, HM (2½ Ton)	36* 45* 44*	
33-36	6	HU Late; HW, HX, HY, HZ	28* 29*	
1933	6	HU Early	30	
30-32	6	HR, HS, HT	28* 29*	

McCORD MUFFLERS

MERCURY

Year	No. Cyl.	Model	McCord No.
1949	8	9M (118" W.B.) (Exc. Sta. Wagon)	353
1949	8	9M (118" W.B.) (Sta. Wagon)	353
1949	8	Canada Monarch & Mercury (118" W.B.)	353
46-48	8	69M, 79M, 89M (118" W.B.) (Exc. Sta. Wagon)	305
46-48	8	69M, 79M, 89M (118" W.B.) (Sta. Wagon)	305
47-48	8	Canada C51A Mercury (114" W.B.) (Exc. Sta. Wagon)	305
47-48	8	Canada C51A Mercury (114" W.B.) (Sta. Wagon)	305
47-48	8	Canada 59A Mercury, C59A Monarch (118" W.B.) (Exc. Sta. Wagon)	305
47-48	8	Canada 59A Mercury, C59A Monarch (118" W.B.) (Sta. Wagon)	305
1946	8	Canada C51A Mercury (114" W.B.)	305
1946	8	Canada 59A Mercury, C59A Monarch (118" W.B.)	305
1942	8	29A (118" W.B.) 100 HP	305
1941	8	19A (118" W.B.) 100 HP	9
39-40	8	99A, 09A, 100 HP	9

NASH

1949	6	Series 4940-50 ("600")	354
1949	6	Series 4960-70 (Amb.)	355
1948	6	Series 4840-50 ("600")	339
1948	6	Series 4860-70 (Amb.) (Exc. Conv. Coupe)	142
1948	6	Series 4861-71 (Amb.) (Conv. Coupe)	142
46-47	6	Series 4640, 4740 (Amb. "600")	339
46-47	6	Series 4660, 4760 (Amb. Six)	142
1942	6	Series 4240 (Amb. "600")	189
41-42	6	Series 4160, 4260 (Amb. Six)	142
41-42	8	Series 4180, 4280 (Amb. Eight)	190
1941	6	Series 4140 (Amb. "600") (After N4-5485)	189
39-40	6	Series 3920, 4020 (Amb. Six)	142
39-40	8	Series 3980, 4080 (Amb. Eight) (Front)	92
39-40	8	Series 3980, 4080 (Amb. Eight) (Rear Muffler with Pipes Attached)	213
1938	6	Series 3820 (Amb. Six)	142
1938	8	Series 3880 (Amb. Eight) (Front)	92
1938	8	Series 3880 (Amb. Eight) (Rear Muffler with Pipes Attached)	212
1937	6	Series 3720 (Amb. Six)	93
1937	8	Series 3780 (Amb. Eight) (Front)	92
1937	8	Series 3780 (Amb. Eight) (Rear Muffler with Pipes Attached)	•211
1936	6	Series 3640 ("400")	90

OLDSMOBILE

1949	6	Futuramic (Can. 35 Series)	129
1949	8	V8, 88 Futuramic (Can. 37 Series)	356
1949	8	V8, 98 Futuramic	356
1948	8	68 Dynamic (Exc. Station Wagon) (Can. 37 Series)	356
1948	8	68 Dynamic (Station Wagon)	356
1948	8	78 Dynamic (Can. 34 Series)	356
1948	8	98 Futuramic (Can. 38 Series)	356
46-48	6	66 Special, Dynamic (Exc. Station Wagon) (Can. 35 Series)	129
46-48	6	66 Special, Dynamic (Station Wagon)	129
46-48	6	76 Dynamic (Can. 36 Series)	129
1947	8	68 Special (Exc. Station Wagon)	302
1947	8	68 Special (Station Wagon)	302
46-47	8	78 Dynamic (Can. 38 Series)	302
46-47	8	98 Custom Cruiser (Can. 39 Series)	302
1942	6	F42 (66) Special (Exc. Station Wagon) (Can. 35 Series)	129
1942	6	F42 (66) Special (Station Wagon)	129
1942	6	G42 (76) Dynamic (Can. 36)	129
1942	8	E42 (68) Special (Exc. Station Wagon)	302
1942	8	E42 (68) Special (Station Wagon)	302
1942	8	J42 (78) Dynamic	302
1942	8	L42 (98) Custom Cruiser (Can. 39 Series)	302
1941	6	F41 (66) Special (Exc. Station Wagon) (Can. 35 Series)	129
1941	6	F41 (66) Special (Station Wagon)	129
1941	6	G41 (76) Dynamic, H41 (96) (Can. 36 Series)	129
1941	8	E41 (68) Special (Exc. Station Wagon)	129
1941	8	E41 (68) Special (Station Wagon)	129
1941	8	J41 (78) Dynamic, L41 (98) (Can. 39)	129
1940	6	F40 (60) (Exc. Station Wagon) (Can. 35 Series)	128
1940	6	F40 (60) (Station Wagon)	128
1940	6	G40 (70) (Can. 36 Series)	129
1940	8	L40 (90) (Can. 39 Series)	129

PACKARD

48-49	6	(110) 2240	163
48-49	8	(120) 2201, 2211; (160) Super 2202	357
48-49	8	(160) Super 2232 (1¾" Outlet)	97
48-49	8	(160) Super 2232 (2" Outlet)	357
48-49	8	(180) Custom 2206, 2233	303
48-49	8	(180) Custom 2213	338
46-47	6	(110) 2100, 2130	163
46-47	8	(120) 2101, 2111	97

PACKARD (Continued)

Year	No. Cyl.	MODEL	McCord No.
46-47	8	(160) 2103, 2106	303
46-47	8	(180) 2123, 2126	338
1942	6	(110) 2000, 2010	163
1942	6	(110) 2020	163
1942	8	(120) 2001, 2011	97
1942	8	(120) 2001A Hearse	97
1942	8	(120) 2021	97
1942	8	(160) 2003; (180) 2006	303
1942	8	(160) 2003A Hearse	155
1942	8	(160) 2004; (180) 2007	155
1942	8	(160) 2005, 2055; (180) 2008	155
1942	8	(160) 2023	155
1941	6	(110) 1900	163
1941	8	(120) 1901	97
1941	8	(120) 1901A Hearse	97
1941	8	(160) 1903; (180) 1906	155
1941	8	(160) 1903A Hearse	155
1941	8	(160) 1904; (180) 1907	155
1941	8	(160) 1905; (180) 1908	155
1941	8	(Clipper) 1951	97
1940	6	(110) 1800	163
1940	8	(120) 1801	97
1940	8	(120) 1801A Hearse	97
1940	8	(160) 1803; (180) 1806	155
1940	8	(160) 1803A Hearse	155
1940	8	(160) 1804; (180) 1807	155
1940	8	(160) 1805; (180) 1808	155
1939	6	1700	163
1939	8	(120) 1701	97
1939	8	(120) 1702 7 Pass.	97
1939	8	(Super) 1703	139
1939	8	(Super) 1705	139

PLYMOUTH

1949	6	P17 (Exc. Suburban)	366
1949	6	P17 Suburban	366
1949	6	P18 (Exc. Conv. Coupe & Sta. Wagon)	366
1949	6	P18 Conv. Coupe	369
1949	6	P18 Station Wagon	366
46-48	6	Canada P15S, P15C	110
42-48	6	P14, P15 DeLuxe & Spec. DeLuxe (Exc. Suburban and Conv. Coupe)	110
42-48	6	P14, P15 DeLuxe & Spec. DeLuxe (Suburban)	110
42-48	6	P14, P15 DeLuxe & Spec. DeLuxe (Conv. Coupe)	110
1942	6	Canada P14 (Conv. Coupe)	110
1941	6	P11 (Exc. Suburban)	60
1941	6	P11 (Suburban)	60
1941	6	P12 (Exc. Suburban and 7 Pass.)	136
1941	6	P12 (Suburban)	136
1941	6	P12 (7 Pass.)	136
40-41	6	Canada P9, P11 (Muffler Only)	157
40-41	6	Canada P10, P12 (Exc. 7 Pass.) (Muffler Only)	158
40-41	6	Canada P10, P12 (7 Pass.) (Muffler Only)	158
1940	6	P9	60
1940	6	P10 (Exc. 7 Pass.)	136
1940	6	P10 (7 Pass.)	136
1939	6	P7	60
1939	6	Canada P7	86
1939	6	P8 (Exc. 7 Pass.)	136
1939	6	P8 (7 Pass.)	136
1938	6	Canada P5 (After Eng. No. C-1001) (Muffler Only)	86
37-38	6	Canada P3 All; P5 to Eng. No. C-1001 (Muffler Only)	60
37-38	6	Canada P4, P6 (Exc. 7 Pass.) (Muffler Only)	136
37-38	6	Canada P4, P6 (7 Pass.) (Muffler Only)	136
37-38	6	P3, P5 (Muffler only)	60
37-38	6	P3, P5 (With Exhaust Pipe Attached)	200
37-38	6	P4, P6 (Exc. 7 Pass.) (Muffler only)	136
37-38	6	P4, P6 (Exc. 7 Pass.) (With Exhaust Pipe Attached)	201
37-38	6	P4, P6 (7 Pass.) (Muffler only)	136
37-38	6	P4, P6 (7 Pass.) (With Exhaust Pipe Attached)	201
1936	6	P1	60
1936	6	P2 (Exc. 7 Pass.)	136
1936	6	P2 (7 Pass.)	136
1935	6	PJ Early (Muffler only)	60
1935	6	PJ Early (With Exhaust Pipe Attached)	•23
1935	6	PJ Late (Muffler only)	60
1935	6	PJ Late (With Exhaust Pipe Attached)	•23

PONTIAC

1949	6	25 Torpedo	63
1949	6	26 Streamliner (Exc. Station Wagon)	63
1949	6	26 Streamliner (Station Wagon)	63
1949	8	27 Torpedo	63
1949	8	28 Streamliner (Exc. Station Wagon)	63
1949	8	28 Streamliner (Station Wagon)	63
46-48	6	Canada 20-22 Series	41
46-48	6	25LA-MA-PA Torpedo (Std. Trans.)	63
46-48	6	25LA-MA-PA Torpedo (Hyd. Trans.)	63
46-48	6	26LB-MB-PB Streamliner (Exc. Station Wagon) (Std. Trans.)	63
46-48	6	26LB-MB-PB Streamliner (Exc. Station Wagon) (Hyd. Trans.)	63
46-48	6	26LB-MB-PB (Station Wagon) (Std. Trans.)	63
46-48	6	26LB-MB-PB (Station Wagon) (Hyd. Trans.)	63
46-48	8	27LA-MA-PA Torpedo (Std. Trans.)	63
46-48	8	27LA-MA-PA Torpedo (Hyd. Trans.)	63
46-48	8	28LB-MB-PB Streamliner (Exc. Station Wagon) (Std. Trans.)	63
46-48	8	28LB-MB-PB Streamliner (Exc. Station Wagon) (Hyd. Trans.)	63
46-48	8	28LB-MB-PB (Station Wagon) (Std. Trans.)	63
46-48	8	28LB-MB-PB (Station Wagon) (Hyd. Trans.)	63
1942	6	25-KA Torpedo	63

PONTIAC (Continued)

Year	No. Cyl.	MODEL	McCord No.
1942	6	26-KB Streamliner	63
1942	8	27-KA Torpedo	63
1942	8	28-KB Streamliner	63
41-42	6	Canada 20, 22 Fleetleader	41
1941	6	24-JC Custom; 26-JB Streamliner	63
1941	6	25-JA DeLuxe	63
1941	8	27-JA DeLuxe	63
1941	8	28-JB Streamliner; 29-JC Custom	63
1940	6	Canada 22 Arrow	39
1940	6	25-HA Special	63
1940	6	26-HB DeLuxe	63
1940	8	28-HA DeLuxe	63
1940	8	29-HB Torpedo	63
1939	6	Canada 22 Arrow	35
1939	6	Canada 25 Chieftain	128
1939	6	25-EA Quality	63
1939	6	26-EB DeLuxe	63
1939	8	28-EA DeLuxe	63
1938	6	Canada 25	35
37-38	6	Canada 26	35
37-38	6	CA, DA, DeLuxe	63
37-38	8	CA, DA, DeLuxe	63
35-36	6	AA, AB, 701, BA, BB, DeLuxe	63
35-36	8	AA, 605, BA, DeLuxe	63

STUDEBAKER

1949	6	8G Champion	340
1949	6	16A Commander (119" W.B.)	342
1949	6	16A Commander (123" W.B.) Land Cruiser	342
1948	6	15A Commander (119" W.B.)	342
1948	6	15A Commander (123" W.B.) Land Cruiser	342
47-48	6	6G-7G Champion	340
1947	6	14A Commander (119" W.B. to Ser. 4281926)	342
1947	6	14A Commander (119" W.B. After Ser. 4281926)	342
1947	6	14A Commander (123" W.B. to Ser. 4281926)	342
1947	6	14A Commander (123" W.B. After Ser. 4281926)	342
42-46	6	Champion 4G, 5G	301
1942	6	Commander 12A	81
1942	8	President 8C	162
1941	6	Champion 3G	133
1941	6	Commander 11A	81
1941	8	President 7C	162
39-40	6	Champion 1G, 2G	133
38-40	6	Commander 7A, 8A, 9A, 10A	81
38-40	8	President 4C, 5C, 6C	80

TERRAPLANE

1938	6	80 (Except Utility Coach, Coupe and Sedan)	125
1938	6	80 Utility Coach, Coupe and Sedan	73
1938	6	81, 82	125
1938	6	88	125
1937	6	71, 72	73
1936	6	61, 62	72
1935	6	GU, Special, DeLuxe	72
34-35	6	K, KU, KS, 51, 52	72
1933	8	KT	73
32-33	6	K	72

WILLYS

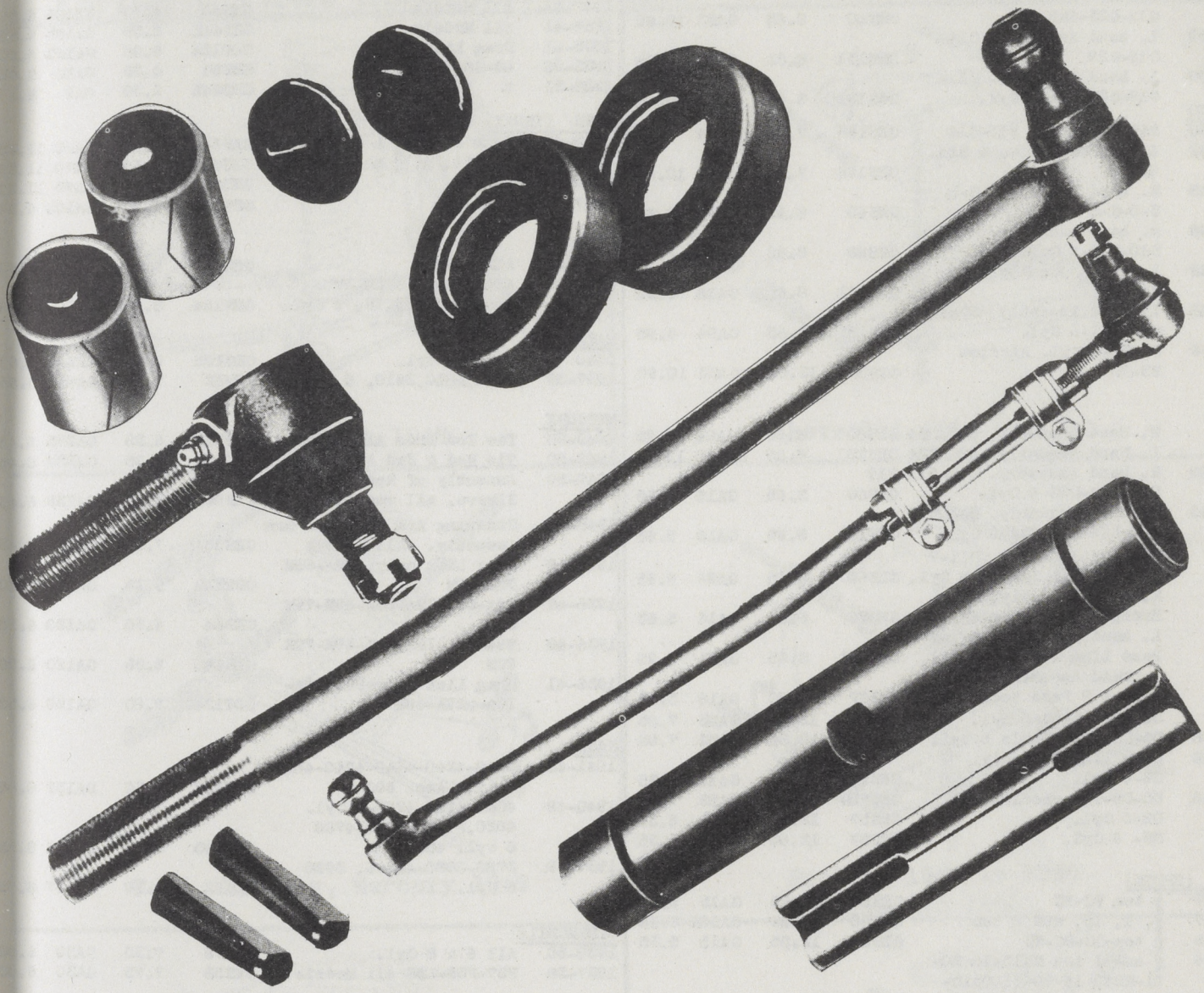
48-49	4	Jeepster, VJ2	344
47-49	4-6	Station Wagon, Panel Del., 4-63, 6-63 (½ Ton)	344
47-49	4	Truck, 2WD-4WD (¾-1 Ton)	344
46-49	4	Civilian Jeep, CJ2A (After Serial No. 18638)	343
41-42	4	441, 442 Americar	114
1940	4	440 (Exc. Panel Del. and Station Wagon)	114
1940	4	440 (Panel Del. and Station Wagon)	114
1939	4	39 Standard (Overland)	113
1939	4	39 DeLuxe (Overland)	114
37-39	4	37, 38, 48	113
35-37	4	77, 77A (After Ser. 42000)	113
33-35	4	77 (Sedan, Coupe and Pickup to Ser. 42000)	113
33-35	4	77 (Exc. Sedan, Coupe and Pickup to Ser. 42000)	113
31-33	6	90, 90A, 97, 98D, 99	73
30-33	8	80, 80D, 88, 88A	529
30-31	6	98B	73

Due to lack of space we did not list Exhausts and Tail Pipe Assemblies. However, we are in a position to service your requirements on almost all models of cars and trucks. If you are interested in acquiring a catalogue detailing these items, please write,

D. ACKLAND & SON, LTD.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

TIE ROD ENDS, DRAG LINKS and KING BOLT SETS



PASSENGER CAR and TRUCK SPECIFICATIONS

MAKE YEAR	MODEL	TIE ROD SET	LIST PRICE	KING BOLT SET	LIST PRICE
BUICK					
1946-50	70	GES71	10.25	GA24	6.95
1942-48	40-50-H40-H50	GES128	10.40	GA24	6.95
1938-42	40-H40-50-H50-60-70-90	GES71	10.25	GA24	6.95
1937	40-60	GES101	8.65	GA24	6.95
1934-36	40	GES40	9.30	GA24	6.95
CHEVROLET					
1949-50	Long Rod Assembly	GES514	6.00	GA80	5.05
1949-50	All Models	GES167	4.90	GA80	5.05
1940-48	KA-KH-AG-AH-BG-BH-DJ-DK ET-EK-FJ-FK-use with $\frac{3}{4}$" Pitman Arm. Sedan DeLuxe 73K-73L-73M	GES84	4.50	GA80	5.05
1940-48	JA Master DeLuxe, KA-KH AG-AH-BG-BH-DJ-DK-ET	GES83A	5.65	GA28	4.90
1939	JA Master DeLuxe	GES83A	5.65	GA28	4.90
1939	Drag Link with fixed Sockets	GES83A	5.65	GA28	4.90

MAKE YEAR	MODEL	TIE ROD SET	LIST PRICE	KING BOLT SET	LIST PRICE
CHEVROLET (TRUCK)					
1949	G.P. 1/2 Ton	GES29	7.55	GA111	5.20
1949	G.P. 3/4 Ton	GES29	7.55	GA5	4.70
1946-48	DS-ES-FS-1 ton. OR-OS PJ-PK-QJ-RT-RK-1½ ton	GES26	6.25	GA5	4.70
1935-40	Q-R-S-T-VA-VB-VC-VD WA-WB-WC	GES26	6.25	GA5	4.70
CHRYSLER					
1949-50	R&L Assembly. C45-7 Pass Limo. & Stn Wagon C46-6&8 Cyl. C47-8 Cyl. C48-C49	GES166	7.90	GA146	12.60
1940-48	R. hand Assembly C25-C25S C26-C27-C28-C28S-C30-C33 C34-C36-C-37-C38-C39-C40	GES60	8.65	GA94	6.95
1940-48	L. hand Assembly C25-C25S C26-C27-C28-C28S-C30-C33 C34-C36-C37-C38-C39-C40	GES131	8.65	GA94	6.95

PASSENGER CAR and TRUCK SPECIFICATIONS

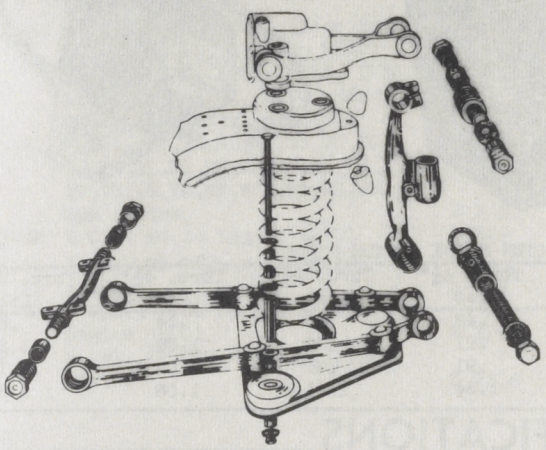
MAKE YEAR	MODEL	TIE ROD SET	LIST PRICE	KING BOLT SET	KING BOLT LIST PRICE
CHRYSLER (CONT'D)					
1937-39	R. hand Assembly. C16-C18-C22	GES60	8.65	GA16	5.65
1937-39	R. hand Assembly. C14-C19-C23-6&8 Cyl.	GES60	8.65	GA33	10.60
1937-39	L. hand Assembly. C16-C18-C22	GES131	8.65	GA16	5.65
1937-39	L. hand Assembly. C14-C19-C23-6 & 8 Cyl.	GES131	8.65	GA33	10.60
DE SOTO					
1949-50	R&L Assembly, S13-S14	GES166	7.90	GA94	6.95
1949-50	6 & 7 Pass. Limo & Stn. Wagon	GES166	7.90	GA146	12.60
1937-48	R. hand Assembly, S-3 S-5-S-6	GES60	8.65	GA16	5.65
1937-48	R. hand Assembly, S7-S8-S10-S11-6 Cyl.	GES60	8.65	GA94	6.95
1937-48	L. hand Assembly, S3-S5-S6	GES131	8.65	GA16	5.65
1937-48	L. hand Assembly, S7-S8 S10-S11-6 Cyl.	GES131	8.65	GA94	6.95
1933-36	SG-S2-6 Cyl. Airflow SE-SD	GES50	13.85	GA33	10.60
DODGE					
1950	R. Hand Assembly, D30-D34	GES60	8.65	GA94	6.95
1950	L. Hand Assembly, D30-D34	GES131	8.65	GA146	12.60
1940-49	R. hand Assembly. D14-D17-D19 D22-D24-D33 6 Cyl.	GES60	8.65	GA16	5.65
1940-49	L. hand Assembly. D14-D17 D19-D22-D24-D33-6 Cyl.	GES131	8.65	GA16	5.65
1939	R. hand Assembly, D11-7 Pass Limo & Sedan, 6 Cyl.	GES60	8.65	GA94	6.95
1939	R. hand Assembly, D11, Except 7 Pass. Sedan	GES76	8.70	GA16	5.65
1939	L. hand Assembly, D11-7 Pass Limo & Sedan 6 Cyl.	GES131	8.65	GA94	6.95
1939	L. hand Assembly. D11 Except 7 Pass Sedan.	GES77	8.70	GA16	5.65
1938	D8-18' wheel-6 cyl.	GES57	12.85	GA53	7.05
1937-38	D5-D8-16" wheels 6 cyl.	GES57	12.85	GA53	7.05
1936-38	Drag Link End only. D2-6 Cyl.	GES57	12.85	GA15	5.35
1936-38	D5-D8-16" wheel-6 Cyl	GES70R	6.45	GA53	7.05
1936	D2-6 Cyl.	GES57	12.85	GA15	5.35
1935	DU- 6 Cyl.	GES57	12.85	GA15	5.35
DODGE (TRUCK)					
1940-47	½ ton VC-WC	GES60	8.65	GA15	5.35
1939-47	¾, 1, 1½, and 2 ton	GES50	13.85	GA101	9.15
1937-39	½ ton-MC-RC-TC	GES57	12.85	GA15	5.35
1936-39	½ and 1 ton MD15-16-20-21-RD15-16-20-21-TD15-20-21	GES57	12.85	GA15	5.35
1936-38	¾ and 1 ton VD 15 to 21 WD 15 to 21-Drag Link only. LCX-½ ton MC-MCX RC-RCX	GES70R	6.45	GA15	5.35
1933-36	½ ton KC-KCL-HC-HCL-LC	GES35	12.85	GA16	5.65
1933-35	¾, 1, 1½, 2 ton	GES50	13.85	GA16	5.65
FORD					
1949-50	All 6 & 8 Cyl.	GES154	5.15	GA230	6.35
1949-50	R. hand Tie Rod fixed end, all 6 & 8 Cyl.	GES500	4.70	GA230	6.35
1949-50	R. hand Assembly, Rod, Sleeve, End	GES500A	8.20	GA230	6.35
1949-50	L. hand Tie Rod fixed end, all 6 & 8 Cyl.	GES501	4.70	GA230	6.35
1949-50	L. hand Assembly, Rod, Sleeve, End	GES501A	8.20	GA230	6.35
1949-50	Steering Arm to Idler Arm Assembly Rod. all 6 & 8	GES502	7.10	GA230	6.35
1949	R. hand Assembly-8BA-8HA	GES500A	8.20	GA230	6.35
1949	L. hand Assembly-8BA-8HA	GES501A	8.20	GA230	6.35
1949	R. hand End Assembly 8BA-8HA	GES500	4.70	GA230	6.35
1949	L. hand End Assembly 8BA-8HA	GES501	4.70	GA230	6.35
1949	Steering Arm Assembly	GES502	7.10	GA230	6.35

MAKE YEAR	MODEL	TIE ROD SET	LIST PRICE	KING BOLT SET	KING BOLT LIST PRICE
FORD (CONT'D)					
1942-48	Drag Link only. 90 H.P. 2GA, 6GA, 7GA, 8GA	GET129	9.15	GA120	6.50
1937-41	All Models	GES64	4.70	GA105	6.50
1937-41	All Models	GES64L	2.35	GA105	6.50
1935-41	Drag Link only	GDT124	9.00	GA105	6.50
1935-36	48-68	GES64	4.70	GA10	8.05
1928-31	A	GES64L	2.35	GA1	8.15
FORD (TRUCK)					
1935-48	Comm'l. ½, ¾ & 1 ton	GES64L	2.35	GA70	11.35
1935-48	Comm'l. ½, ¾ & 1 ton	GES64	4.70	GA70	11.35
1935-48	1½ ton	GES98	6.25	GA70	11.35
1937-41	¾, 1 ton	GDT124	9.00	GA105	6.50
HUDSON					
1948-50	All Models	GES147	9.00	GA89	16.70
1936-47	All except 1936-37 DeLuxe 6, 63,73, 6 Cyl.	GES104	8.60	GA89	16.70
LAFAYETTE					
1940	4010 6 Cyl.	GES105	9.15	GA68R	8.65
1937-39	3710,3810,3910, 6 Cyl.	GES62	7.10	GA68R	8.65
MERCURY					
1949-50	Tie Rod Ends All Models	GES156	6.30	GA235	6.45
1949-50	Tie Rod & End All Models	GES503	5.05	GA235	6.45
1949-50	Assembly of Rod, End & Sleeve. All models	GES503A	8.65	GA235	6.45
1949-50	Steering Arm to Idler Arm Assembly. All Models	GES504	7.90	GA235	6.45
1942-48	Drag Link only. 29A-69M 79M-89M	GDT129	9.15	GA120	6.50
1936-48	99A-09A-19A-29A-69M-79M 89M	GES64	4.70	GA120	6.50
1936-48	99A-09A-19A-29A-69M-79M 89M	GES64L	2.35	GA120	6.50
1936-41	Drag Link only-99A-09A-19A--29A-69M	GDT124	9.00	GA120	6.50
NASH					
1941-48	4140-4240-4640-4740-4840 6 Cyl. Amb. 600	GES132	6.30	GA137	8.55
1940-48	4080-4180-4280-8 Cyl. 4020, 4160-4260-4760 6 cyl. 4860	GES105	9.15	GA137	8.55
1937-39	3720-3820-Amb.6, 3920 6 Cyl.	GES62	7.10	GA137	8.55
OLDSMOBILE					
1939-50	All 6 & 8 Cyl.	GES78	7.30	GA30	6.00
1937-38	F37-F38-L38 All Models	GES58	7.75	GA30	6.00
PACKARD					
1941-48	All including 1951 Clipper	GES125	9.70	GA147	12.60
1936-47	All except 1951 Clipper	GES48	9.75	GA149	10.70
PLYMOUTH					
1940-50	R. hand Assembly	GES60	8.65	GA16	5.65
1940-50	L. hand Assembly	GES131	8.65	GA16	5.65
1939	R. hand Assembly	GES76	8.70	GA16	5.65
1939	L. hand Assembly	GES77	8.70	GA16	5.65
1936-38	Drag Link End only	GES70R	6.45	GA15	5.35
PONTIAC					
1940-50	All 6 & 8 Cyl.	GES78	7.30	GA90	5.30
1939	All 6 & 8 Cyl.	GES78	7.30	GA30	6.00
1937-38	6CA-8CA-6DA-8DA-6 & 8 Cyl.	GES58	7.75	GA30	6.00
STUDEBAKER					
1947-49	6G-7G-8G	GES161	6.80	GA156	28.65
1941-46	3G-4G-5G	GES161	6.80	GA155	23.65
1941-42	7C-8C-11A-12A	GES119	9.45	GA157	28.65
1938-39	Six 7A; Commander 6, 8A	GES25	7.35	GA54	7.75
1934-37	Dictator 6, A, 1A, 3A, 5A	GES25	7.35	GA34	7.90
WHITE					
47-49	Station Wagon Jeep	GES745	6.15	GA140	8.20

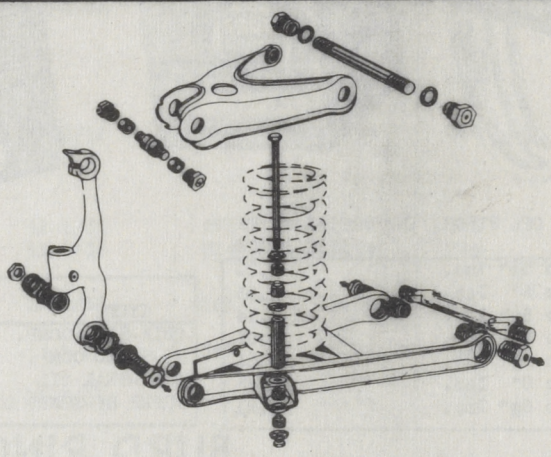
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SUSPENSION REPLACEMENT G-H PARTS

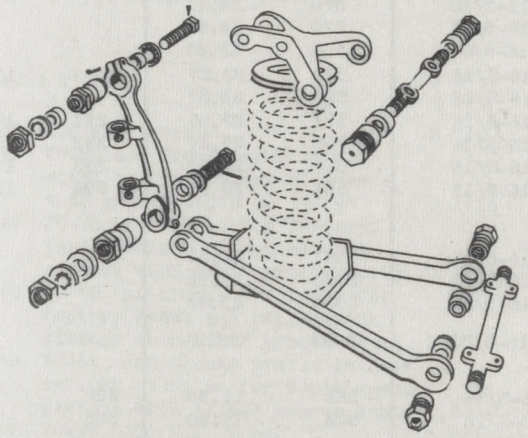
EXPLODED VIEWS INDEPENDENT FRONT WHEEL SUSPENSION PARTS



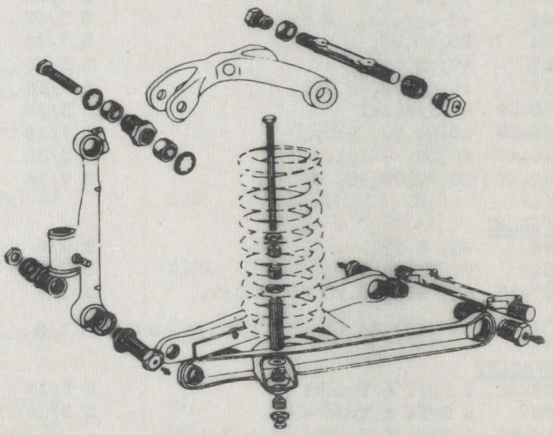
Chevrolet to 1948



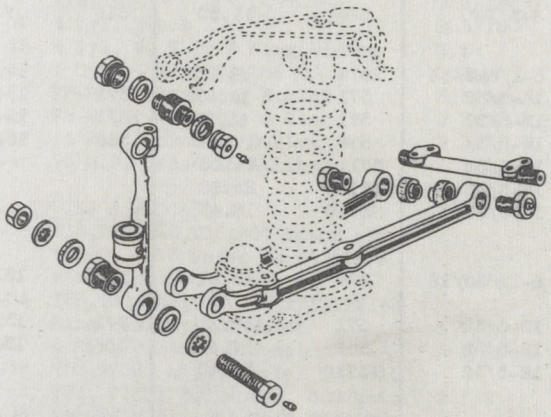
Chevrolet 1949 to 1950



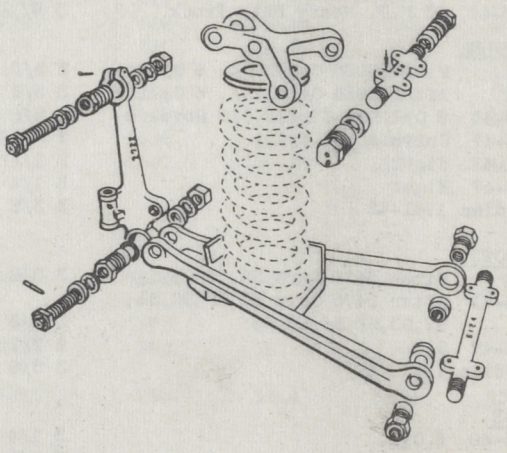
Ford, Lincoln, Mercury 1949



Pontiac 1949 to 1950
Cadillac to 1950



Buick, Oldsmobile to 1950
Cadillac, La Salle to 1949
Pontiac to 1948



Chrysler, Dodge, De Soto and
Plymouth 1941 to 1950

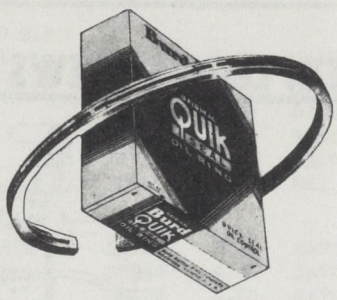
These views are shown to give you some idea of "INDEPENDENT FRONT WHEEL SUSPENSION STRUCTURE". We are in a position to supply all your requirements. Space does not allow for a complete listing. Please order by description of Car, Model, Year, etc.



BURD
AUTOMOTIVE
PRODUCTS







QUIK-SEAL OIL RINGS, INDISTRIAL SIZES

SIZE	LIST PRICE
5 1/16" to 5½" Inc.	1.29
5 9/16" to 6" Inc.	1.51
6 1/16" to 6½" Inc.	2.14
6 9/16" to 7" Inc.	3.09
7 1/16 to 7½" Inc.	3.56
7 9/16" to 8" Inc.	4.43
8 1/16 to 8½" Inc.	4.91

OPEN STOCK PISTON RINGS

TYPE	Thru. 4" List	Thru. 4¼" List	Thru. 4½" List	Thru. 4¾" List	Thru. 5 1/16" List
QUIK-SEAL COMP.	.37	.42	.45	.54	.69
HI-SPEED COMP.	.83	.91	.99	1.09	1.29
QUIK-SEAL OIL	.83	.91	.99	1.09	1.19
SUPER HI-SPEED OIL	1.19	1.34	1.51	1.58	1.86

BURD RING SPECIFICATIONS

YEAR	MODEL	DIAM.	NO. & SIZE COMP RINGS	NO. & SIZE OIL RINGS	SUPER HI-SPEED SET NO.	SUPER HI-SPEED LIST	QUIK-SEAL SET NO.	QUIK-SEAL LIST
Buick								
1934-35	60,40	3 3/32	16-1/8	16-5/32	570	24.11		
1936	40 Special 8 Cyl.	3 3/32	16-1/8	16-5/32	570	24.11		
1936	60,80,90, 8 Cyl.	3 7/16	16-1/8	16-5/32	588	23.37		
1937	40, 8 Cyl.	3 3/32	16-3/32	16-3/16	589	23.37	389	17.22
1937	60,80,90, 8 Cyl.	3 7/16	16-3/32	16-3/16	590	23.37		
1938-39	40 Special	3 3/32	8-3/32&1/8	16-3/16	591	23.37	391	17.22
1938-39	60,80,90, 8 Cyl.	3 7/16	8-3/32&1/8	16-3/16	592	23.37	392	17.22
1940-47	40,50, 8 Cyl.	3 3/32	16-3/32	16-3/16	593	23.37	393	17.22
1940-47	60,70,80,90, 8 Cyl.	3 7/16	16-3/32	16-3/16	594	23.37	394	17.22
CADILLAC								
1936	60, 8 Cyl.	3 3/8	16-1/8	16-5/32	5981	24.53		
1936	70,75, 8 Cyl.	3 1/2	16-1/8	16-5/32	5984	25.96		
1937-38	60, 60S,65,70,75, 8 Cyl.	3 1/2	16-1/8	16-5/32	5984	25.96		
1939-45	60 (S), 61,62,63,67,72,75, 8 Cyl.	3 1/2	8-3/32&1/8	16-5/32	5983	25.96		
CHEVROLET								
1929-32	6 Cyl. & Trucks	3 5/16	12-5/32	6-5/32	522	11.50	322	7.54
1933	6 Cyl. & Trucks	3 5/16	12-5/32	6-3/16	523	11.50	323	7.54
1934-36	6 Cyl. & Trucks with 3/16" Depth Grooves	3 5/16	12-1/8	6-3/16	524	11.50	324	7.54
1934-36	6 Cyl. & Trucks with 11/64" Depth Grooves	3 5/16	12-1/8	6-3/16	524A	11.50	324	7.54
1937-47	6 Cyl. & Trucks	3 1/2	12-1/8	6-3/16	525	11.50	325	7.54
1941-47	93 H.P. Heavy Duty Truck	3 9/16	12-1/8	6-3/16	566	11.50	366	7.54
CHRYSLER								
1934	First 8925 Cars, CA, 6 Cyl.	3 3/8	12-1/8	6-1/8&3/16	574	18.21	374	13.48
	After 8925 Cars, CA, 6 Cyl.	3 3/8	12-1/8	12-5/32	571	18.21	371	13.48
1935-41	6 Cyl. C6,C7,C17,C18 Royal 6	3 3/8	12-1/8	12-5/32	571	18.21	371	13.48
1942-47	Chrysler, 6 Cyl.	3 7/16	12-3/32	12-5/32	556	17.44	356	13.48
1937-41	Eight	3 1/4	16-1/8	16-5/32	5711	24.53		
1942-47	Eight	3 1/4	16-3/32	16-5/32	5712	23.98		
Canadian	1941-42	3 3/8	6-3/32&1/8	12-5/32	S5710	18.43		
DE SOTO								
1934	First 5475 Cars SE, 6 Cyl.	3 3/8	12-1/8	6-1/8&3/16	574	18.21	374	13.48
1934-41	After 5475 Cars SE,SF,SC,S1, S2,S3,S5,S6,S7,S8	3 3/8	12-1/8	12-5/32	571	18.21	371	13.48
1942-47	S10	3 7/16	12-3/32	12-5/32	556	17.44	356	13.48
Canadian	1941	3 3/8	6-3/32&1/8	12-5/32	S5710	18.43		
DODGE								
1935-40	6 Cyl.	3 1/4	12-1/8	12-5/32	560	15.24	360	11.50
1941	D19, 6 Cyl.	3 1/4	6-3/32&1/8	12-5/32	561	15.24	361	11.50
1942-47	D22, 6 Cyl.	3 1/4	12-3/32	12-5/32	562	15.24	362	11.50
Canadian	D19,D20,D23. 1941-42	3 3/8	6-3/32&1/8	12-5/32	S5710	18.43		
DODGE TRUCKS								
1933-34	6 Cyl. HC,HCL, to Serial No. 8010947, KC to Engine T5-10067 KCL to Serial No. 8029154 and 9202456	3 1/8	12-1/8	6-1/8&5/32	532	15.24	332	11.50
	2020947, KH,LC,LE,TC,VC series	3 1/8	12-1/8	12-5/32	533	15.24	333	11.50

BURD RING SPECIFICATIONS

YEAR	MODEL	DIAM.	NO. & SIZE COMP RINGS	NO. & SIZE OIL RINGS	SUPER HI-SPEED SET NO.	SUPER HI-SPEED LIST	QUIK-SEAL SET NO.	QUIK-SEAL LIST
DODGE TRUCKS CONT'D.								
1934-35	6 Cyl. K22,K35,K36,K37,K38, K45,K46,K47,K48 to Engine T7-9132	3 3/8	12-1/8	6 1/8&3/16	574	18.21	374	13.48
1934-36	6 Cyl. K22,K35 to K38, K45V to K48V, LG40 to LG43, LH45 to LH48 after Engine T7-9132	3 3/8	12-1/8	12-5/32	571	18.21	371	13.48
1934-40	6 Cyl. K32 to K34, After Engine T6-33757, D2, K32V to K34V, LF28, LHD30, LT35, LF35, LF36, LF37, K19, K18V, K19V, K32V, TD, VD, LF, Series K34NC1	3 1/4	12-1/8	12-5/32	560	15.24	360	11.50
1937-41	6 Cyl. MC,MD,ME,MF,MG,MH,RC, RD,RE,RF,RG,RH,TE,TF,TG,TH, VF,VG,VH,VM,WF,WFM,WG,WH,WGM, WHM series	3 3/8	12-1/8	12-5/32	571	18.21	371	13.48
1941-42	6 Cyl. WC to Engine 42001	3 3/8	12-1/8	12-5/32	534	15.24	334	11.50
1941-42	6 Cyl. WD Series to Engine 42001	3 1/8	6-3/32&1/8	12-5/32	561	15.24	361	11.50
1941-42	6 Cyl. WC-WD series After Engine 42001	3 1/4	12-3/32	12-5/32	562	15.24	362	11.50
1942	6 Cyl. WF,WFM,WG,WGM,WH,WHM, series	3 7/16	12-3/32	12-5/32	556	17.44	356	13.48
FARGO								
1933	6 Cyl.	3 1/8	12-1/8	6-3/16	532	15.24	332	11.50
1935-36	6 Cyl. FC-3,FD1,FD3;1939-FH1	3 1/8	12-1/8	12-5/32	533	15.24	333	11.50
1937-39	6 Cyl. FE,FG,FH3,FH4,FH6	3 3/8	12-1/8	12-5/32	571	18.21	371	13.48
1935-39	6 Cyl. FC4,FD4,FH2,FH15	3 1/4	12-1/8	12-5/32	560	15.24	360	11.50
FORD								
All Model T		3 3/4	8-1/4	4-1/4			310	4.95
1928	A	3 7/8	8-1/8	4-1/8			311	4.95
1929-33	A,B and Truck	3 7/8	8-1/8	4-5/32	512	7.54	312	4.95
1932-47	V8-85 and Truck for factory steel or replacement pistons with groove depth of 11/64"	3 1/16	16-3/32	8-5/32	513	15.24	313	9.90
1932-47	V8-85 and Truck, for factory type Aluminum or replacement pistons with 5/32" groove depth.	3 1/16	16-3/32	8-5/32	513A	15.24	313	9.90
1937-40	V8-60 and trucks available for factory steel and replacement pistons with 5/32" groove depth.	2.6	16-3/32	8-5/32	514A	15.24	314	9.90
1937-40	V8-60, and trucks available only in .020 oversize for replacement pistons with 11/64" groove depth	2.6	16-3/32	8-5/32	514	15.24	314	9.90
1939-47	V8-95, 100 H.P. Truck	3 3/16	16-3/32	8-5/32	583	15.24	383	9.90
1932-47	V8-85--4 Ring replacement pistons with 11/64" groove depth.	3 1/16	16-3/32	16-5/32	515	20.41	383	9.90
1939-47	95, 100 H.P. Truck, 4 Ring Piston	3 3/16	16-3/32	16-5/32	517	20.41	317	15.24
1939-42	4 Cyl. Truck	3 3/16	8-3/32	4-5/32	518	7.54	318	4.95
1941-45	6 Cyl. 90 H.P. 3 Ring Piston	3.3	12-3/32	6-3/16	516	11.50	316	7.54
1946-47	6 Cyl. 4 Ring Piston	3.3	12-3/32	12-3/16	5108	15.24	3108	11.50
1937-47	V8-85,90 Canadian 3 Ring	3 1/16	16-3/32	8-3/16	5104	15.24	3104	9.90
1937-47	V8-85,90 Canadian 4 Ring	3 1/16	16-3/32	16-3/16	5105	20.41	3105	15.24
1937-47	95 H.P. Canadian 3 Ring	3 3/16	16-3/32	8-3/16	5106	15.24	3106	9.90
1939-47	95 H.P. Canadian 4 Ring	3 3/16	16-3/32	16-3/16	5107	20.29	3107	15.24
G.M.C. TRUCKS & MOTORS								
1932-38	T18,T19,T23,T16;200 Motor after 835000, 213 Motor to T6016; 3 ring pistons	3 5/16	12-3/32	12-5/32	5681	18.43	324	7.54
1932-35	T26,T31,T33,T43,T45,T73,T73H;3 Ring Piston; 257 Motor	3 7/16	12-1/8	6-3/16	582	13.48		
1936-37	4 Ring Piston; 213 Motor	3 5/16	12-1/8	12-3/16	573	18.21		
1936-38	T33,T33H, After Serial T33-3105, F33, F33H; 286 Motor, 309 Motor	3 5/8	12-1/8	6-1/8&3/16	567	19.42	3670	13.86
1934-38	T46,T46H,F46,T51,T51H,T51W,T74 T74H After Engine 1331-4477; 331 Motor.	3 3/4	12-1/8	6-1/8&3/16	5680	19.42	3680	13.86
1937-38	T14, Serial T14-11252 to 34527, T16,T16H,T16L, after Serial T16-18801, F16,G16H; 230 Motor.	3 7/16	12-1/8	12-3/16	581	18.21	381	13.48
1938	T14 After Serial T14-34527, T145 T15, T155; 233 Motor	3 7/16	12-1/8	6-3/16	582	13.48		
1941	300,350; 236 Motor	3 5/8	12-1/8	6-1/8&3/16	567	19.42	3670	13.86
1941	733 Motor	3 1/2	12-1/8	6-3/16	525	11.50	325	7.54
	1239, 239 Engine	3 5/16	18-1/8	6-3/16	5467	16.23		

BURD RING SPECIFICATIONS

YEAR	MODEL	DIAM.	NO. & SIZE COMP RINGS	NO. & SIZE OIL RINGS	SUPER HI-SPEED SET NO.	SUPER HI-SPEED LIST	QUIK-SEAL SET NO.	QUIK-SEAL LIST
G.M.C.	TRUCKS & MOTORS CONT'D.							
	1257, 257 Engine	3 7/16	18-1/8	6-3/16	5468	16.23		
	228 Engine	3 9/16	18-1/8	6-3/16	5460	16.23		
	1286, 286 Engine	3 5/8	18-1/8	6-3/16	5466	16.23		
	308 Engine	3 13/16	18-1/8	6-1/4	555	16.23	355	11.28
	248 Engine	3 23/32	18-1/8	6-3/16	5461	16.23		
	331, 1331 Engine	3 3/4	18-1/8	6-3/16	5469	16.23		
	256, 270 Engine	3 25/32	18-1/8	6-3/16	5470	16.23		
HUDSON								
1933	After Engine No 2806, 6 Cyl.	2 15/16	12-3/32	6-1/8&3/16	540	18.21	340	13.48
1935-Early 39	--To Engine No. 24502, 6 Cyl.	3	12-3/32	12-3/16	542	18.21	342	13.53
Late 1939-47	--After Engine 24501, 6 Cyl.	3	12-3/32	6-5/32&3/16	543	18.21	343	13.48
1933-34	8 Cyl.	3	16-3/32	8-1/8&3/16	K551	23.38		
1935-39 Early	--To Engine No. 28658, 8 Cyl.	3	16-3/32	16-3/16	K542	24.15	K543	24.15
Late 1939-47	--After Engine No. 28657 8 Cyl.	3	16-3/32	8-5/32&3/16	K543			
INTERNATIONAL								
1933-42	C1,C12,C15,C30,CS30,C300,D1,D2, D2M,D15,D15M;HD213 Motor-K1,K2, K3,K4; 214 Motor	3 5/16	18-3/32	6-3/16	580	15.62	380	11.28
1937-42	D12,D30,D30B,DS30,DS30B,D186T, DS186T,D300,DS300;HD232 Motor-- K5 with GRD233 Motor	3 5/16	18-3/32	6-3/16	580	15.62	380	11.28
1933-36	A2,B2,M2,A1,C20,M3, with Waulk. XAH.	3 5/8	12-1/8	4-3/16	1036E	9.63	1036	3.91
1934-40	A5,A6,C55,C60,D50,D246F,D500, Power Unit PA50;FBB-298 Engine	3 3/4	12-1/8	6-1/8&3/16	5435	18.81		
1939-42	D40,DS40,K7,KS7;FAB259 Engine, FAC 259 Engine	3 1/2	6-3/32&1/8	6-1/8&3/16	5432	18.81		
1937-38	D35,DS35,DS216T	3 3/8	12-1/8	6-1/8&3/16	574	18.21	374	13.48
1937-38	D40,DS40; FAB 259 Engine	3 1/2	12-1/8	6-1/8&3/16	5433	18.81		
1936-40	C5,D5; Wauk. FC	3 1/4	8-1/8	4-3/16	1041E	6.82	1041	3.81
	FAB 241, FAC 241 Engine	3 3/8	18-1/8	6-3/16	5431	16.23		
	FAB 223, FAB 3 Engine	3 7/16	18-1/8	6-3/16	5434	16.23		
	BLD 250 Engine	3 7/16	6-3/32 12-1/8	6-3/16	5436	16.23		
	FAC 269, BLD 269 Engine	3 9/16	6-3/32 12-1/8	6-3/16	5438	16.23		
	FBB 279 Engine, 1 Oil Ring	3 5/8	18-1/8	6-3/16	5437	16.23		
	FBB 318, FBC 318, 1940 Red 318, Std. 5000 to 10,000 ALT 1942-46	3 7/8	6-3/32	6-3/16	5681	18.43		
LAFAYETTE								
1937-40	3710, 3810, 3910, 4010	3 3/8	12-1/8	12-5/32	571	18.43	371	13.48
1934-36	3510, 3610	3 1/4	12-1/8	6-1/8&3/16	5022	19.42		
LINCOLN ZEPHER								
1936-37		2 3/4	24-3/32	12-5/32	5101	22.99		
1938-39		2 3/4	24-3/32	12-3/16	5102	22.99		
1940-41		2 7/8	24-3/32	12-3/16	5103	22.99		
MERCURY								
1939-47		3 3/16	16-3/32	8-5/32	583	15.24	383	9.90
1939-47	V8-95, 4 Ring Replacement Pistons with 11/64" Groove Depth	3 3/16	16-3/32	16-5/32	517	20.41	317	15.24
1939-47	95 HP Canadian 3 Ring	3 3/16	16-3/32	16-3/16	5106	15.24	3106	9.90
1939-47	95 HP Canadian 4 Ring	3 3/16	16-3/32	16-3/16	5107	20.41	3107	15.24
NASH								
1930--480; 1934-36--1220,400,3520,3620, 3640,3640A, 400 Series		3 3/8	12-1/8	6-1/8&3/16	574	18.21	374	13.48
1937-41	LaFayette Amb. 3710,3810,3910, 4010, Amb.6, 3720,3820,3920, 4020,4120, to N6-45310	3 3/8	12-1/8	12-5/32	571	18.21	371	13.48
1941-47	Amb. 6, 4160 After N6-45309, 4260,	3 3/8	12-3/32	12-5/32	502	17.44	302	13.48
1941-47	Amb. 600, 4140. 4240	3 1/8	12-3/32	6-3/16	503	13.48	303	8.91
1932-47	1080, 1180,1280,3580,3680,3780, 3880,3980,4080,4180,4280	3 1/8	16-1/8	8-1/8&3/16	5021	25.96		
1933-36	1120,3510,3610	3 1/4	12-1/8	6-1/8&3/16	5022	19.42		
OLDSMOBILE								
1932--F32; 1934--F34,F35 (to engine No. F453980) 6 cyl. 3 Ring Piston		3 5/16	12-1/8	6-3/16	584	13.48	324	7.54
1932-35	8 Cyl.	3	16-1/8	8-1/8&3/16	595	23.38		
1933	F-33, 6 Cyl. 3 Ring Piston	3 3/8	12-1/8	6-3/16	575	13.48	375	9.52
1935	F35 After Eng. No. 453980, 6 Cyl.	3 5/16	12-1/8	12-5/32	J587	18.21		

WE SPECIALIZE IN CARRIAGE & MACHINE BOLTS

BURD RING SPECIFICATIONS

YEAR	MODEL	DIAM.	NO. & SIZE COMP RINGS	NO. & SIZE OIL RINGS	SUPER HI-SPEED SET NO.	SUPER HI-SPEED LIST	QUIK-SEAL SET NO.	QUIK-SEAL LIST
OLDSMOBILE CONT'D.								
1936	F36,6 Cyl.	3 5/16	12-1/8	12-3/16	573	18.21		
1936	L36, 8 Cyl.	3	16-1/8	16-3/16	596	23.38	396	17.22
1937	L37, 8 Cyl.	3 1/4	16-1/8	16-3/16	597	23.38		
1937-38	F37,F38, 6 Cyl.	3 7/16	12-1/8	12-3/16	581	18.21	381	13.48
1938-47	8 Cyl.	3 1/4	16-3/32	16-3/16	598	23.38		
1939-40	6 Cyl.	3 7/16	12-3/32	12-3/16	599	17.44	399	13.48
1941-47	6 Cyl.	3 1/2	12-3/32	12-3/16	501	17.44	301	13.48
PACKARD								
1936-39	120,138CD,1601,1601A,1601D, 1602,1701,1702, 8 Cyl.	3 1/4	16-1/8	8-3/16	586	18.04		
1938-39	6 Cyl.	3 1/2	12-1/8	6-3/16	585	13.48	325	7.54
Late 1939-47:	110 Series 6 Cyl.	3 1/2	6-3/32&1/8	6-3/16	505	13.48	305	8.91
Late 1939-47:	120; 8 Cyl.	3 1/4	8-3/32&1/8	8-3/16	504	18.04		
Late 1939-47:	160-180; 8 Cyl.	3 1/2	8-3/32&1/8	8-3/16	K505	18.04		
1937-39	Super 8, 1500,1501,1502,1603, 1604,1605,1703,1704,1705	3 3/16	16-1/8	16-5/32	5031	25.96		
1932-36	900,902,1001,1002,1100,1101, 1102,1200,1201,1202,1400,1401, 1402, Std. 8	3 3/16	24-1/8	8-5/32	5034	22.17		
1935	120, 120A	3 1/4	16-1/8	8-5/32	5033	19.19		
1932-39	12 Cyl.	3 7/16	36-1/8	12-5/32	5032	35.26		
PLYMOUTH								
Late 1934-40:	6 Cyl.	3 1/8	12-1/8	12-5/32	533	15.24	333	11.50
1941	6 Cyl.	3 1/8	6-3/32&1/8	12-5/32	534	15.24	334	11.50
1942-47	6 Cyl.	3 1/4	12-3/32	12-5/32	562	15.24	362	11.50
1938-42	6 Cyl. (Canadian)	3 3/8	12-1/8	12-5/32	571	18.21	371	13.48
PONTIAC								
1935	6 Cyl.	3 3/8	12-1/8	6-1/8&3/16	574	18.21	374	13.48
1936	6 Cyl.	3 3/8	12-1/8	6-3/16	575	13.48	375	9.52
1937-38	6 Cyl.	3 7/16	12-1/8	6-3/16	582	13.48		
1939-40	6 Cyl.	3 7/16	12-3/32	6-3/16	506	13.48	306	8.91
1941-47	6 Cyl.	3 9/16	12-3/32	6-3/16	508	13.48	308	8.91
1933-35	8 Cyl.	3 3/16	16-1/8	8-1/8&3/16				
1936-38	8 Cyl.	3 1/4	16-1/8	8-3/16	577	18.04	377	12.65
1939-47	8 Cyl.	3 1/4	16-3/32	8-3/16	507	18.04	307	12.65
STUDEBAKER								
1934-37	Dictator; 6 Cyl.	3 1/4	12-1/8	6-3/16	578	13.48		
1938	Early 39, Commander; 6 Cyl.	3 5/16	12-1/8	6-3/16	584	13.48	324	7.54
1939-47	Late--Commander; 6 Cyl.	3 5/16	12-3/32	6-3/16	509	13.48	309	8.91
1939-42	Champion; 6 Cyl.	3	6-3/32&1/8	6-5/32	565	13.48	365	8.91
1935	Dictator; 6 Cyl.	3 1/4	18-1/8	6-3/16	5651	16.23	1074	10.79
1936-45	President 8	3 1/16	16-1/8	8-3/16	5652	18.59		
STUDEBAKER TRUCKS								
1935	Truck-Cont. F6199, F6218	3 1/4	18-1/8	6-3/16	5651	16.23		
1936-37	Ace 2T2, 2M2, J15, J15M, 2TB2, J15B	3 1/4	12-1/8	6-3/16	578	13.48		
1937-40	J20,J20M,K20,K20M,J20MB; Hercules JXB	3 5/8	12-1/8	6-1/8&3/16	567	19.42	3670	13.86
1936-37	Boss,2M6,2W6, Wauk. 6BM	3 5/8	12-1/8	6-1/8&3/16	567	19.42	3670	13.86
1937-40	J25,J25M,K25,K25M,J25MB, K25MB, Hercules JXD	4	12-1/8	6-1/8&3/16	5690	19.42	3690	13.86
1938-39	K10,K15,K15M,K15B	3 5/16	12-1/8	6-3/16	584	13.48	324	7.54
1940-41	K10.K15,K15M,M16,K15B	3 5/16	12-3/32	6-3/16	509	13.48	309	8.91
1941	M15	3	6-3/32&1/8	6-5/32	565	13.48	365	8.91
TERRAPLANE								
1933	6 Cyl.	2 15/16	12-3/32	6-1/8&3/16	540	18.21	340	13.48.
1933	8 Cyl.	2 15/16	16-3/32	8-1/8&3/16	K540	24.15		
1934	6 Cyl.	3	12-3/32	6-1/8&3/16	551	17.44	351	13.48
1935-39	6 Cyl.	3	12-3/32	12-3/16	542	18.21	342	13.53
WHITE TRUCKS								
1928-34	60,60K,61,601,601C,602,2AB,2AC, 2A Motors	3 1/2	12-1/8	6-1/8&3/16				
1931-35	61, 611,612,612K,613,618,618K; 4A,4AB,4AC,4AD Motors	3 3/4	12-1/8	6-1/8&3/16				
1938-40	802,500,800M; 221 Motors	3 3/8	12-1/8	6-1/8&3/16	574	18.21	374	13.48
1941	140A, 362	3 7/8	6-3/32	12-1/4	5061	21.01		
WILLYS CAR & TRUCK								
1929-32	6 Cyl.	3 1/4	12-1/8	6-3/16	578	13.48		
1933-36	99; 6 Cyl.	3 5/16	18-3/32	6-3/16	580	15.62	380	11.28
1933-39	77,37,38,48, 4 Cyl.	3 1/8	12-3/32	4-3/16	579	10.51	379	7.54
1939-47	39,440,441,442; 4 Cyl. 3 Ring Pistons	3 1/8	8-3/32	4-3/16	L579	9.13		

BURD RING SPECIFICATIONS

Combination sets for Tractors and Combines

OPEN STOCK QUIK-SEAL COMPRESSION RINGS 2.6" TO 6-15/16" INC.

DIAMETER	LIST
2.6" to 4" Inc.	.36
4 1/16" to 4 1/4" Inc.	.40
4 5/16" to 4 1/2" Inc.	.44
4 9/16" to 4 3/4" Inc.	.52
4 13/16" to 5 1/16" Inc.	.83
5 1/8" to 5 1/2" Inc. to 3/8" wide Inc.	.79
7/16" to 5/8" wide Inc.	.81
5 9/16" to 6" Inc. to 3/8" wide inc.	.99
7/16" to 5/8" wide Inc.	1.08
6 1/16" to 6 1/2" Inc. to 3/8" wide Inc.	1.06
7/16" to 5/8" wide Inc.	1.21
6 9/16" to 6 15/16" Inc. to 3/8" wide Inc.	1.21
7/16" to 5/8" wide Inc.	1.52

OPEN STOCK QUIK-SEAL OIL RINGS 2.6" TO 7-1/16" INC.

DIAMETER	LIST
2.6" to 4" Inc.	.80
4 1/16" to 4 1/4" Inc.	.88
4 5/16" to 4 1/2" Inc.	.96
4 9/16" to 4 3/4" Inc.	1.10
4 13/16" to 5 1/16" Inc.	1.24
5 1/8" to 5 1/2" Inc.	1.36
5 9/16" to 6" Inc.	1.53
6 1/16" to 6 1/2" Inc.	2.04
6 9/16" to 7" Inc.	2.66

SPECIFICATIONS and LIST PRICES

YEAR	MODEL	NO. CYL.	DIAM.	NO. & WIDTH COMP. RING	NO. & WIDTH OIL RING	SPECIAL DUTY SET NO.	SPECIAL DUTY LIST	STANDARD TYPE SET NO.	STANDARD TYPE LIST
ALLIS CHALMERS									
1938-41	B,1B, Power Unit B15	4	3 1/4	8-1/8	4-3/16	1041E	6.82	1041	3.80
1939-41	C,RC, After Engine 6687	4	3 3/8	12-1/8	4-3/16	1049E	9.63	1049	4.95
1933-42	W,WC,WF, Power Unit W25	4	4	8-1/8	4-1/8&3/16	1006E	9.63	1006	4.95
1933-36	M,U,UC,IU,Power Unit 40; Sp. Patrol 42,M27-34	4	4 3/8	12-3/16	4-1/4			1010	4.95
1936-41	M,U,UC,IU, Power Unit 40; Sp. Patrol 42 for 4 or 5 Ring Pistons	4	4 1/2	12-5/32	8-1/4			1047	7.54
1924-32	20-35, E, Monarch 35	4	4 3/4	12-1/4	4-1/4			1027	5.50
1932-41	K,E,35,A,Spd. Patrol 54	4	4 3/4	12-1/4	4-1/4			1027	5.50
1932-35	Combines Hillside #1, Prarie #2, 12-16 Cut; Herc OX	4	4	12-3/16	4-3/16			1008	4.13
1932-37	Combine #3, 10-12 Cut WaukXA	4	3 1/2	8-3/16	4-3/16			1002	3.14
CASE									
VAC Tractor		4	3 1/4	12-1/8	4-1/4	1055E	9.35	1055	6.55
1929-39	C Series; 1939 D Series	4	3 7/8	4-3/32&8-1/8	4-3/16			1056	6.55
1940-42	V,VO,VI,VC, Cont. F-124	4	3	12-1/8	4-1/4	1042E	9.63	1042	4.07
1935-41	R,RC,RI Wauk. FK	4	3 1/4	8-1/8	4-3/16	1041E	6.82	1041	3.80
1941-42	S, SC,SO	4	3 1/2	12-1/8	4-3/16	1040E	9.63	1040	3.91
1929-38	C,CI, Ind. CC,CD,CE,Co	4	3 7/8	8-3/16	4-3/16	1005E	6.82	1005	3.36
1938-42	D,DC,DH,DO,DL,DS,DI, Late C, CC Series	4	3 7/8	8-1/8	4-1/8&1/4	1039E	9.63	1039	3.74
1920-37	12-20, 12-20A	4	4 1/8	8-3/16	4-3/16			1012	3.36
1929-46	L,LA,LE,LI,Ind, LO,LJ, LAE, LAI	4	4 5/8	12-5/32	4-5/32	1025E	12.87	1025	5.50
1918-29	K, 15-27, 18-32	4	4 1/2	8-1/4	4-1/4			1023	3.36
1920-37	Combines "P", Prarie, 12-16-20, W Hillside, 14-16, AE Skid Eng., Combine M,W, Combine P to Serial 304364	4	4 1/8	8-3/16	4-3/16			1012	3.36
1929-38	Combine "P" After Serial 304364, 12-20 Cut, CC	4	3 7/8	8-3/16	4-3/16	1005E	6.82	1005	3.14
1935-41	Combines "C" Prarie, K, 8-12 Cut, Wauk. FK,FC	4	3 1/4	8-1/8	4-3/16	1041E	6.82	1041	3.80
1927-37	Combines "B" Prarie, 9, A,B, 8-10-12 Cut, Wauk XA	4	3 1/2	8-3/16	4-3/16			1002	3.14
1935-41	Combine V,10-15 Cut Wauk XAH	4	3 5/8	12-1/8	4-3/16	1036E	9.63	1036	3.91
1940-42	V,VO,VI,VC, Cont F-124	4	3	12-1/8	4-1/4	1042E	9.63	1042	4.07
JOHN DEERE									
1937-42	H Tractor	2	3 9/16	6-1/8	2-1/4			1046	2.26
1934-38	B,BI,BN,BW, to serial 59999; BO,BR, to 328999	2	4 1/4	6-3/16	2-3/16			1016	2.53
1938-42	B,BI,BN,BW, After Serial 59999; BO, BR, after 328999	2	4 1/2	6-3/16	2-3/16			1021	2.53
1933-42	Gen. Purpose A,AI,AN,AO,AR, AW	2	5 1/2	8-1/4	2-1/4			1028	3.69
1929-30	Gen. Purpose 10-20 to serial 223802 St. Tread, Wide Tread to 402039	2	5 3/4	8-3/16	2-3/16			1029	3.69
1931-35	Gen. Purpose Std. Tread After Serial 223802, Wide Tread After 403961	2	6	8-1/4	2-1/4			1031	4.62
1937-41	Model G	2	6 1/8	8-1/4	2-1/4			1032	4.62
1925-27	D,15-27 to Tractor 53388	2	6 1/2	8-5/16	2-5/16			1033	4.84
1928-42	D, After Eng. 53388 DI, Ind. W, No. 111-13 Stat. Eng.	2	6 3/4	8-1/4	2-1/4			1034	5.01

YOU CAN BE SURE WITH PROVEN PRODUCTS.

BURD RING SPECIFICATIONS

YEAR	MODEL	NO. CYL.	DIAM.	NO. & WIDTH COMP. RING	NO. & WIDTH OIL RING	SPECIAL DUTY SET NO.	SPECIAL DUTY LIST	STANDARD TYPE SET NO.	STANDARD TYPE LIST
JOHN DEERE CONT'D.									
1928-30	Combines 1,2,3,17,8-16 Cut Herc. OX	4	4	12-3/16	4-3/16			1008	4.13
	Combines 5A, 10-12 Cut Hill-Side 12-14 Cut Herc OCC	4	4	8-1/8	4-1/8&3/16	1006E	9.63	1006	4.95
	Comb. 7 Prarie Herc. IXB	4	3 1/4	8-1/8	4-3/16	1041E	6.82	1041	3.81
	Comb. 5A Prarie #35 Hillside Herc. QXC-3	6	3 3/8	12-1/8	6-1/8&3/16	574	16.39		
	Comb. #5,5A,15,10-12 Cut, Lyc. AFD	4	3 3/4	8-3/16	8-3/16	1003E	9.63	1003	3.74
	Combines #17, 36 Prarie # 36A, Extreme Hillside, 36B, Med. Hillside, Herc. JXC	6	3 3/4	12-1/8	6-1/8&3/16	468	15.95		
	LA,LU, Power Unit	2	3 1/2	4-1/8	2-3/16	1066E	4.07	1066	2.64
	LA,LU, Power Unit Expander Type Set	2	3 1/2	4-1/8	2-3/16	1066EH	4.07	1066	2.64
1937-39	5A, Also 10-12 Cut, Hercules 00B Engine	4	3 3/4	12-1/8	4-3/16			1065	6.55
FORDSON									
1916-26	(Flat Head Piston)	4	4	8-1/4	4-1/4			1007	4.13
1927-28	(Dome Head Piston)	4	4	12-5/32	4-5/32			1009	3.14
1929-35	Except 34; also 39	4	4 1/8	12-5/32	4-5/32			1010	4.95
1934-38		4	4 1/8	12-5/32	4-7/32			1011	4.95
FORD FERGUSON									
1939-42		4	3 3/16	8-3/32	4-5/32	518	6.99	318	4.46
MASSEY HARRIS									
1927-29	Certified 20-30	4	4 3/8	8-1/4	4-1/4			1020	3.36
1929-36	Certified 12-20, PA,CH.	4	3 7/8	8-3/16	4-3/16	1005E	6.82	1005	3.14
1936-39	Pacemaker, Challenger, CH	4	3 7/8	12-1/8	4-3/16			1004	3.91
1936-39	25,26,41, 25 Industrial	4	4 3/8	12-1/8	4-3/16			1018	4.95
1927-36	35,26-41, Tractor 69000 and up, Wallis 20-30	4	4 3/8	8-1/4	4-1/4			1020	3.36
	81, Rowcrop to Tractor 420000 101 Jr. Rowcrop to Tractor 420000 Std. Tread to Tractor 435000 Cont. F-124 with 3/16" Oil Ring	4	3	16-1/8	4-3/16	1001E	8.53	1001	5.50
	WITH 1/4" OIL RING	4	3	12-1/8	4-1/4	1042E	9.63	1042	4.07
	101, Rowcrop to 258285 Std. Tread from 357870, Chrysler Motor	6	3 1/8	12-1/8	12-5/32	533	13.81	333	10.12
	101, Rowcrop from 258286 Std. Tread from 357871, Chrysler Motor	6	3 1/4	6-3/32&1/8	12-5/32	561	13.81	361	10.12
	Combines 15,17,6-8 Cut, Herc IXB; Wauk. FC	4	3 1/4	8-1/8	4-3/16	1041E	6.82	1041	3.80
	201 to Tractor 98001 Combine 20, 16 Cut, Chrysler Motor	6	3 3/8	12-1/8	12-5/32	571	16.39	371	12.05
1926-36	Combs. 6,9A,10-12 Cut, After Motor 162000, Buda WTU	4	3 3/4	8-3/16	8-3/16	1003E	9.63	1003	3.74
1932-33	Gen. Purpose 15-22	4	3 1/2	8-3/16	4-3/16			1002	3.14
	Gen. Purpose 15-22 Comb. 11 12 Cut Herc. OCC	4	4	8-1/8	4-1/8&3/16	1006E	9.63	1006	4.95
1938-41	201 Tractor with Herc. JXD	6	4	12-1/8	6-1/8&3/16	469	15.95		
1936-40	Comb. 14, 16 Cut Herc. JXC Std. Tread After 435,000, 101, 102JR, 81 RowCrop after 420,000 Cont. F140 Eng. 1/4" Oil Ring	6	3 3/4	12-1/8	6-1/8&3/16	468	15.95		
	Std. Tread After 435,000, 101, 102JR, 81 RowCrop after 420,000 Con. F140 Eng. 3/16" Oil Ring	4	3 3/16	12-1/8	4-1/4	1064E	9.35	1064	6.55
	101SR Cont. F226 Eng.	4	3 3/16	12-1/8	4-3/16	1078E	9.35	1078	6.55
	101, 102JR Early Model Cont. F162 Engine	6	3 5/16	18-1/8	6-1/4	1069E	14.03	1069	9.79
	101JR, 102JR, Cont. F162, LF162 F4162,PF162 Engines	4	3 7/16	12-1/8	4-3/16	1062E	9.35	1062	6.55
	102Sr. Cont A244 Eng.	4	3 7/16	12-1/8	4-1/4	1068E	9.35	1068	6.55
	202 Cont M290 Engine	6	3 7/16	24-1/8	6-1/4	1067E	15.95	1067	11.66
	201 After 98,000, 203 Cont. M330 Engine	6	3 3/4	18-1/8	6-1/4	1071E	14.03	1071	9.79
		6	4	18-1/8	6-1/4	1070E	14.03	1070	9.79
McCORMICK-DEERING									
1933--early--36, F12,I12, O12, Fairway 12 (3 or 4 Ring Piston)		4	3	8-1/8	8-3/16			1000	4.40
1936-39	Late--F12,I12,O12,W12, Fairway 12, Power Unit P12; F14, I14,O14,W14, (4 or 5 Ring Piston)	4	3	16-1/8	4-3/16	1001E	8.53	1001	5.50
1939-42	Farmall A and B	4	3	12-1/8	4-1/4	1042E	9.63	1042	4.07
1939-42	Farmall H, Power Unit 4	4	3 3/8	4-1/8&5/32	4-5/32&1/4	1042E	9.63	1043	4.07
1924-39	Farmall, F20, Fairway 20,T20, Tractor 20	4	3 3/4	8-3/16	8-3/16	1003E	9.63	1003	3.74

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BURD RING SPECIFICATIONS

YEAR	MODEL	NO. CYL.	DIAM.	NO. & WIDTH COMP. RING	NO. & WIDTH OIL RING	SPECIAL DUTY SET NO.	SPECIAL DUTY LIST	STANDARD TYPE SET NO.	STANDARD TYPE LIST
1939-42	Farmall M Tractor T6,06,I6, W6	4	3 7/8	4-1/8&5/32	4-5/32&1/4	1038E	9.63	1038	3.74
1924-32	10-20, Orchard 10-20, Ind. 20, Power Unit 200	4	4 1/4	12-1/4	4-1/4			1017	4.95
1931-37	Farmall 30, F30, 20-30, I30, W30 Power Unit P30	4	4 1/4	12-3/16	4-3/16			1014	4.95
1924-28	15-30 to TG99926	4	4 1/2	12-1/4	4-1/4			1024	4.95
1929-36	15-30 After TG99926, 22-36, Ind. 30, Power Units 300, MP300	4	4 3/4	12-1/4	4-1/4			1027	5.50
	Comb. #22, Wauk. FL; Comb. #20, BD1	4	3	Remove 4 Oil Rings for 3 Piston Rings				1000	4.40
	Comb. #122 Power Unit 4 H Motor	4	3 3/8	4-1/8&5/32	4-5/32&1/4	1043E	9.63	1043	4.07
	Comb. #31, 31T,31R, 31RD, Prarie, #41,51 Hillside 12-16 Cut	6	3 5/16	18-3/32	6-3/16	580	14.03		
	Comb. #8 Prarie. 10-12 Cut Wauk. XA	4	3 1/2	8-3/16	4-3/16			1002	3.14
	Power Unit PA50, U21	6	3 3/4	12-1/8	6-1/8&3/16	TK402	15.29		
	Comb. #7, Hillside; #3,9,10, 11, Prarie, 12-16 Cut	4	3 3/4	8-3/16	8-3/16	1003E	9.63	1003	3.74
1932-36	Trac-Tractor TA40, IA40,WA40, Power Unit PA40, Trac-Tractor T35	6	3 5/8	12-1/8	6-1/8&3/16	TK403	15.29		
	TD9, WD9, ID9	4	4.4	4-1/8&5/32 73/16	8-1/4	1076E	14.58	1076	11.06
MINNEAPOLIS MOLINE									
1937-42	M-M, Universal J, Std. J, Orch. J, Univ. Z, ZTN,ZTU, Std. Z,ZTS,RE Motor, Univ. RT,RTN, RTU, Std. RT,RTS,EE Motor--SE Motor	4	3 5/8	12-1/8	4-3/16	1036E	9.63	1036	3.91
1919-34	TW,TY, 12-20,17-28,KT, 11-20 Kombination, Univ. M, 13-25 to Eng. 525401 and from 526803 to 527031	4	4 1/4	12-1/4	4-1/4			1017	4.95
1930-41	Twin City KTA, Kombination, Univ. M,MTA,KEA Motor 525401 to 526803 and from 527031; Std. U,UTS, Univ. U,UTU,KEC Motor	4	4 1/4	12-5/32	4-1/4			1015	4.95
1921-34	Twin City FE,21-32,FT,FTA to Eng. 900001	4	4 1/2	12-1/4	4-1/4			1024	4.95
1935-41	Twin City FTA,21-32 After Eng. 900001, TG,GT,GTI,GTG	4	4 5/8	12-1/4	4-1/4			1037	5.50
1937-31	Combine Harvester Jr. 8, Herc. IXB	4	3 1/4	8-1/8	4-3/16	1041E	6.82	1041	3.80
	Combine Prarie A, 16-20 to 1927, Herc OX	4	4	12-3/16	4-1/4			1009	3.14
	After 1927, Herc. OX, 4 Ring Piston	4	4	12-3/16	4-3/16			1008	4.13
1930-38	Comb. Prarie "B", "D", 10-12 Cut, Herc OOC (4 Ring Piston)	4	4	8-1/8	4-1/8&3/16	1006E	9.63	1006	4.95
	Herc OOC (3 Ring Piston)	4	4	(Remove 4 Comp. Rings when using Special Duty Set)				1008	4.13
1929-31	Comb. Prarie A,16 Cut, Herc. OXC	4	4 1/4	12-3/16	4-3/16			1014	4.95
1930-35	Comb. Prarie C,30 Cut Herc L	4	4 1/2	12-3/16	4-3/16			1022	4.95
1921-34	Comb. Harvester B Herc G	4	4 3/4	12-1/4	4-1/4			1027	5.50
1935-41	Harvester 12	4	3 5/8	12-1/8	4-3/16	1036E	9.63	1036	3.91
OLIVER HART PARR									
1930-38	18-28 Std. Row Crop	4	4 1/8	12-3/16	4-3/16			1013	4.95
1930-41	A,28-44 Oliver 90, 99 Spc.	4	4 3/4	12-3/16	4-3/16			1026	5.50
1935-38	70HC, Std. 70, Orch. 70, Row Crop 70, 70KD to Tractor 300001	6	3 1/8	18-1/8	6-3/16	1044E	14.41	1044	6.44
1938-41	70 HC, Std. 70, Row Crop 70 70KD After 300000	6	3 1/8	18-1/8	6-1/4	1045E	14.41	1045	6.44
1927-32	12-24, 2 Cyl, for 4 Cyl. Use 2 Sets	2	5 3/4	6-5/16				1030	2.42
1929-32	18-36	2	6 3/4	8-5/16				1035	4.29
1939-41	Comb. Grainmaster 20,22	4	3	(Remove 4 Oil Rings for 3 Ring Pistons)				1000	4.40
1938-41	80HC Std & Row Crop, Comb.	4	4 1/4	12-3/16	4-3/16			1014	4.95
1938-41	80KD Std & Row Crop	4	4 1/2	12-3/16	4-3/16			1022	4.95
1941-42	Row Crop 60	4	3 5/16	12-1/8	8-1/4	1061E	12.10	1061	9.35
	80 KD After # 804,489 Row Crop After #109,627	4	4 1/2	12-3/16	4-1/4			1063	6.55
	Oliver Comb. Early Cont. F162 Engine	4	3 7/16	12-1/8	4-3/16	1062E	9.35	1062	6.55

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

FERODO BRAKE and CLUTCH LININGS



Safety Sam Says . . .

LINE UP WITH

FERODO

FERODO GZ

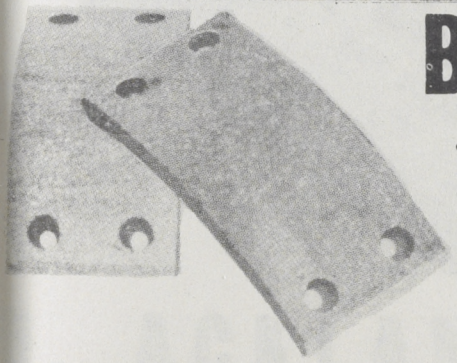


Safe Braking
Long Wearing
Low Maintenance Costs

Solid woven asbestos base in which the asbestos fibre is spun around zinc wire. The non-ferrous wire confers appreciable heat conducting properties and makes Ferodo GZ particularly suitable for light and medium trucks and medium industrial applications. It can be used against steel and cast iron brake drums.

FERODO GW same construction as GZ excepting brass wire is used in place of zinc wire. It is supplied in fifty-foot rolls, up to and including ¼" thickness and twenty-five-foot rolls over ¼".

	THICKNES							PRICE PER FOOT					
WIDTH	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"	WIDTH	5/32"	3/16"	1/4"	5/16"	3/8"	1/2"
1"	.53	$ .60	$ .95	$1.15	$1.40	$1.90	4"	2.35	2.55	3.10	4.00	4.70	6.70
1¼"	.62	.70	1.05	1.40	1.70	2.30	4¼"	2.50	2.70	3.55	4.50	5.30	7.15
1½"	.70	.80	1.20	1.60	2.00	2.65	4½"	2.65	2.85	3.75	4.70	5.60	7.55
1¾"	.84	.90	1.30	1.85	2.30	3.05	4¾"	2.80	3.00	4.00	5.00	5.90	7.95
2"	.95	1.00	1.35	2.00	2.50	3.30	5"	2.95	3.15	4.10	5.00	5.90	8.35
2¼"	1.20	1.20	1.60	2.35	2.95	3.75	5¼"	3.10	3.35	4.50	5.50	6.60	8.80
2½"	1.35	1.35	1.80	2.60	3.15	4.20	5½"	3.25	3.50	4.60	5.70	6.90	9.20
2¾"	1.60	1.70	2.25	2.90	3.50	4.60	5¾"	3.40	3.70	4.80	6.00	7.20	9.60
3"	1.75	1.80	2.25	3.00	3.60	5.00	6"	3.55	3.75	4.80	6.00	7.20	10.00
3¼"	1.90	2.05	2.65	3.30	4.10	5.45							
3½"	2.05	2.20	2.65	3.50	4.35	5.85							
3¾"	2.20	2.40	3.10	3.90	4.60	6.30							



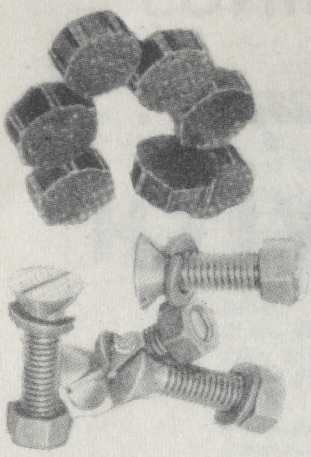
BRAKE BLOCKS

. . . heavy-duty **BLOCK** *for trucks and buses resulting in a low cost per mile.*

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FERODO BRAKE and CLUTCH LININGS



BRAKE BLOCK PLUGS, BOLTS, NUTS, WASHERS

These Plugs give additional braking surface contact--increase the efficiency of the brake--add longer life to the brake blocks--eliminate drum scoring at bolt holes.
64 plugs in box. 5/16" thick. Net Price $3.15

The Bolt countersunk head has a lip which prevents Brake blocks moving or slipping. Size--3/4" x 1 1/2" x 3/8"
32 in a box. Net Price $3,75

FERODO

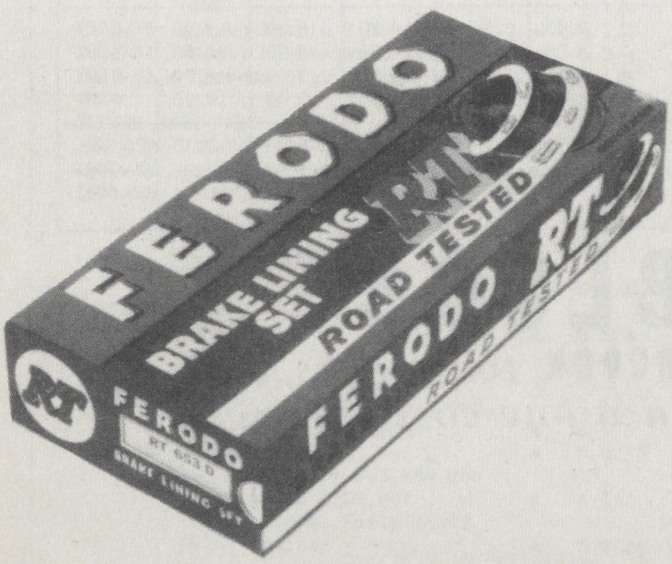
ROLL-MOLD

Composition asbestos non-metallic molded brake lining, suitable for use on passenger cars and light trucks, as well as light industrial operations.

Supplied in twenty-five-foot rolls.



THICKNESS	LIST No. 85			PRICE PER FOOT	
	5/32"	3/16"	1/4"	5/16"	
1"	$ .45	$ .51	$ .81	$1.00	
1¼"	.53	.60	.89	1.20	
1½"	.60	.68	1.02	1.35	
1¾"	.71	.77	1.11	1.55	
2"	.81	.85	1.15	1.70	
2¼"	1.02	1.02	1.36	2.00	
2½"	1.15	1.15	1.53	2.20	
2¾"	1.35	1.45	1.90	2.45	
3"	1.50	1.55	1.90	2.55	
3¼"	1.60	1.75	2.25	2.80	
3½"	1.75	1.85	2.25	3.00	





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LINE UP WITH FERODO



SUPERIOR BRAKE LINING

WOVEN OR MOLDED

in Sets and Rolls

FERODO OFFERS A COMPLETE AUTOMOTIVE BRAKE LINING SERVICE

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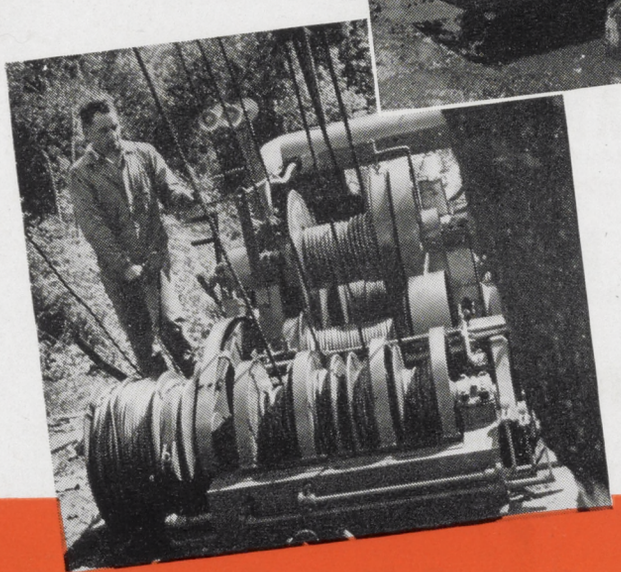
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THERE IS A FER
BRAKE LINING
CLUTCH FACIN
EVERY INDUS
PURPO

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CALGARY, EDMONTON, DAUPHIN, BRANDON

FERODO BRAKE AND CLUTCH SETS

Canadian and American passenger Cars

CLUTCH FACINGS		YEAR AND MAKE	BRAKE LININGS		
Ferodo No.	List	passenger Cars.	Ferodo Set No.	Brake Location	List Per set
		BUICK			
		Buick Models in Canada are the same as in the U.S.A., except the Model Numbers: U.S. Model 90 Cdn. Model 49 U.S. Model 70 Cdn. Model 47 U.S. Model 60 Cdn. Model 46 U.S. Model 50 Cdn. Model 45 U.S. Model 40 Cdn. Model 44			
RT 1057B or RT 1057E	$ 6.75 Set 7.75 Set	1949-46, Model 45, 44	RT 286AD	F & R	$ 8.00
RT 1059A or RT 1059B	8.65 Set 8.65 Set	1949-46, Model 47 1942-41, 46 Century, 47 Roadmaster 1942-41, 49 Limited	RT 2005 RT 295D	F & R F & R	11.50 14.15
RT 1057	6.70 Set	1942, 44 Special, 45 Super	RT 286AD	F & R	8.00
RT 1007A or RT 1005A	6.65 Set 4.35 Set	1941, 44 Special, 45 Super	RT 286AD	F & R	8.00
RT 1007A or RT 1005A or RT 1008A	6.65 Set 4.35 Set 4.75 Set	1940, 44 Special, 45 Super	RT 286AD	F & R	8.00
RT 1059A	8.65 Set	1940, 46 Century, 47 Roadmaster	RT 2005	F & R	11.50
RT 1059A	8.65 Set	1940-39, 48, 49	RT 295D	F & R	14.15
RT 1008A	4.75 Set	1939, 44 Special	RT 286AD	F & R	8.00
RT 1059A	8.65 Set	1939, 46 Century, 48 Roadmaster	RT 296D	F & R	8.85
RT 1057	6.70 Set	1938-37, 44 Special	RT 286AD	F & R	8.00
RT 1169A	10.15 Set	1938, 46 Century, 48 Roadmaster	RT 296D	F & R	8.85
RT 1169A	10.69 Set	1938, 49	RT 295D	F & R	14.15
RT 1142D	7.40 Set	1937, 36 Century, 48 Roadmaster	RT 296D	F & R	8.85
RT 1142D	7.40 Set	1937-36, 49	RT 295D	F & R	14.15
		CHEVROLET			
RT 909A-B	$ 4.95 Set	1948-40 All Models 1949, Models Bonded	RT 653D RS 653D RT 653	F & R F & R F & R	$ 8.10 6.10 8.10
ST 994	1.50 ea.	1939 After Jan. 1, 1939	RT 653D RS 653D	F & R F & R	8.10 6.10
RT 905D	2.80 Set	1939-36 Before Jan. 1, 1939	RT 653D RS 653D	F & R F & R	8.10 6.10
RT 905D	$ 2.80 Set	1935, Master Six	RT 627D RS 627D	F & R F & R	$ 8.50 5.25
RT 905A	2.80 Set	1934, Master	RT 627D RS 627D	F & R F & R	8.50 5.25
RT 905D	2.80 Set	1935, Standard Six	RS 643	F & R	4.40
RT 905A	2.80 Set	1934, Standard	RS 633	F & R	3.85
RT 905A	2.80 Set	1933, Master	RT 614D RS 614D	F & R F & R	6.20 3.90
RT 905A	2.80 Set	1933, Standard	Use RM	F & R	
RT 905A	2.80 Set	1932-30	Use RM Use RM	F & R IHR	
		CHRYSLER			
RT 1057B	$ 6.75 Set	1949, C45, 7 Pass.	RT 1105 Bonded	F & R	$ 9.90

FERODO BRAKE AND CLUTCH SETS

Canadian and American passenger Cars

CLUTCH FACINGS		YEAR AND MAKE	BRAKE LININGS		
Ferodo No.	List	CHRYSLER (Cont'd.)	Ferodo Set No.	Brake Location	List Per set
RT 1008A Fluid Drive RT 993A	4.75 Set 5.75 Set	1949, C45; 1948-46, C38 (six) C38W, C38S	RT 192AD	F & R	8.40
RT 1057B	6.75 Set	1948-46, Eight, C39, C40	RT 1105A RT 1179D	F R	4.95 4.35
RT 1008A Fluid Drive RT 993A	4.75 Set 5.75 Set	1942, C34W, C34S; 1941, C28	RT 1162D RS 1162D	F & R F & R	7.25 6.15
RT 1057B	6.75 Set	1942, C-36 New Yorker, Saragota 1942, C37 Imp.	RT 1105A RT 1179D	F R	4.95 4.35
RT 1008A Fluid Drive RT 993A	4.75 Set 5.75 Set	1942, C34, 6-7 Pass.	RT 1105A RT 1179D	F R	4.95 4.35
RT 1057B	6.75 Set	1941, C30 New Yorker, Saragota, C33 Crown Imp., 1940, C27 Imp.	RT 1105 RT 1179D	F R	4.95 4.35
RT 1169A Fluid Drive RT 1057B	10.15 Set 6.75 Set	1940, C26 Traveler, New Yorker, Saragota	RT 1105A RT 1179D	F R	4.95 4.35
RT 1008A	4.75 Set	1940, C25, C22	RT 1162D RS 1162D	F & R F & R	7.25 6.15
RT 1169A	10.15 Set	1938, C23 Imp., C23 Taxi, C19 Imp. (2 Sets)	RT 1105A	F & R	4.95
RT 1169A	10.15 Set	1938, C20-Cust. Imp. (2 Sets)	RT 273	F & R	9.20
RT 1057B	6.75 Set	1939, C24 Cust. Imp.; 1938, C18 (2 Sets)	RT 273	F & R	9.20
RT 1057B	6.75 Set	1937, C14 Imp.	RT 192D RS 192D	F & R F & R	8.85 7.15
RT 953E	6.15 Set	1936, C7-Six	RT 192D RS 192D	F & R F & R	8.85 7.15
M 981	2.25 ea.	1935, CZ-Eight; 1934, CA-6	RT 192D RS 192D	F & R F & R	8.85 7.15
RT 1057B	6.75 Set	1937, C16-Royal Six	RT 145D RS 145D	F & R F & R	7.95 5.50
ST 1153A	4.30 ea.	1937, C15-Imp., C17 Airflow 8 (2 Sets)	RT 193	F & R	6.75
ST 1153A	4.30 ea.	1936, C9-Airflow 8, C10 Imp. (2 Sets)	RT 193	F & R	6.75
RT 1163	$ 9.80 Set	1935, C1, C2, C3; 1934, CU, CV (2 Sets)	RT 193	F & R	$ 6.75
M 981	2.25 ea.	1935, Six-C6	RT 145D RS 145D	F & R F & R	7.95 5.50
		DE SOTO			
RT 1008A Fluid Drive RT 993A	$ 4.75 Set 5.75 Set	1949, S13 1948-46, S11, S11C	RT 192AD	F & R	$ 8.40
RT 1008A Fluid Drive RT 993A	4.75 Set 5.75 Set	1942, S10; 1941, S8; 1940, S7; 1939, S6	RT 1162D RS 1162D	F & R F & R	7.25 6.15
RT 1057B	6.75 Set	1938, S5	RT 1162D RS 1162D	F & R F & R	7.25 6.15
RT 1057B	6.75 Set	1937, S3	RT 145D RS 145D	F & R F & R	7.95 5.50
RT 953E	6.15 Set	1936, S1 DeLuxe Airstream	RT 145D RS 145D	F & R F & R	7.95 5.50
RT 953E	6.15 Set	1936, S1-Custom, S2	RT 192D RS 192D	F & R F & R	8.85 7.15

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FERODO BRAKE AND CLUTCH SETS

Canadian and American passenger Cars

CLUTCH FACINGS		YEAR AND MAKE	BRAKE LININGS		
Ferodo No.	List	DODGE	Ferodo Set No.	Brake Location	List per set
1057B	$ 6.75	1949, D30, 7 Pass.	RT 1105 Bonded	F & R	$ 9.90
RT 993A	5.75 Set	1949-47, D25, D31, D32 (some 1946)	RT 1106AD	F & R	7.70
RT 993A	5.75 Set	1946, D25, Some models	RT 145AD	F & R	7.70
RT 993A	5.75 Set	1949-46, D24. D30	RT 192AD	F & R	8.40
RT 1008A Fluid Drive	4.75 Set	1942, D22; 1941, D19; 1939, D11.	RT 1162D	F & R	7.25
RT 993A	5.75 Set		RS 1162D	F & R	6.15
RT 993A	5.75 Set	1940, D14, D15, 7 Pass.	RT 1162D RS 1162D	F & R F & R	7.25 6.15
RT 993A	5.75 Set	1942-40, D15, D16, D21, D23	RT 1137D RS 1137D	F & R F & R	6.85 4.85
RT 985A	6.50 Set	1939, D12, D13; 1938, D9, D10	RT 1137D RS 1137D	F & R F & R	6.85 4.85
RT 1057B	6.75 Set	1938, D8	RT 1162D RS 1162D	F & R F & R	7.25 6.15
RT 1057B	6.75 Set	1937, D5	RT 145D RS 145D	F & R F & R	7.95 5.50
RT 985	6.50 Set	1937-35, D3, D4, D6, D7, DV	RT 145D RS 145D	F & R F & R	7.95 5.50
		FORD			
RT 990B	$ 6.90 Set	1949, Ford, Meteor	RT 294-4D	F & R	$ 8.00
RT 1005A or RT 902A	4.35 Set 4.00 Set	1948-46, All	RT 1167D RS 1167D	F & R F & R	8.00 5.25
RT 902A	4.00 Set	1942-41	RT 1167D RS 1167D	F & R F & R	8.00 5.25
RT-M 955B or RT-ST 955B	2.05 Set 4.00 Set	1941-39	RT 1167D RS 1167D	F & R F & R	8.00 5.25
RT-M 955B or RT-ST 955B	2.05 Set 4.00 Set	1938-35	RT 642D RS 642D	F & R F & R	7.95 5.50
RT-M 955B or RT-ST 955B	2.05 Set 4.00 Set	1936-35	RS 642DW	F & R	5.00
RT-M 955B or RT-ST 955B	2.05 Set 4.00 Set	1934-32	RS 515D	F & R	4.25
RT 955	2.05 Set	1931-29	RS 310D	F & R	4.50
W 620	.90 each	1928	RS 310D	F & R	4.50
		HUDSON			
NO FACINGS USED		1949, 490	RT 2015 RT 292A	F R	$ 5.75 4.40
		1947, 171, 172, 178	RT 2012D	F & R	8.00
		1947, 173, 174	RT 292D	F & R	8.85
		1946, 51 Super 6, 52 Comm. 6, 51S, 58	RT 2012D	F & R	8.00
		1946, 53 Super 8, 54 Comm. 8	RT 292D	F & R	$ 8.85
		1942, 6, Del. 6 (20T and 20P), 21 Super 6, 22 Comm. 6	RT 2012D	F & R	8.00
		1941, 10 Del. 6, Traveler 6, 11 Super 6, 12 Comm. 6, 18 Big Boy	RT 2012D	F & R	8.00
		1942, 24 Comm. 8, Cust. 25 and 27, 14 Comm. 8, 15, 17 Comm. Cust. 8	RT 292D	F & R	8.85

FERODO BRAKE AND CLUTCH SETS

Canadian and American passenger Cars

CLUTCH FACINGS		YEAR AND MAKE	BRAKE LININGS		
Ferodo No.	List		Ferodo Set No.	Brake Location	List per set
		HUDSON (Cont'd.)			
NO FACINGS USED		1941, 10C Commercial	RT 284D	F & R	8.20
		1940, 43, Six, 44, 45 Eight, 47 Eight	RT 284D	F & R	8.20
		1940, 40 Six ; 1939-38, 112 Six	RT 282D	F & R	6.65
		1940, 41 Super 6, 40—(½ ton) Commercial; 48—(¾ ton) Commercial; 1939, 92 Six	RT 294D	F & R	8.00
		1939, 95 Country Club 8, 97 Sedan 8	RT 284D	F & R	8.20
		1938, 84 Del. 8, 85, 87 Cust. 8	RT 284D	F & R	8.20
		1937, 74, 76 Del. 8, 75, 77 Cust. 8	RT 284D	F & R	8.20
		1936, 64, 66 Del. 8, 65, 67 Cust. 8	RT 284D	F & R	8.20
		1939, 93 Country Club 6, Pacemaker 6, Commercial Cars 90 (½ ton), 98 (¾ ton)	RT 294D	F & R	8.00
		1938, 83 Six; 1937, 73 Six	RT 294D	F & R	8.00
		1936. 61, 62, 63 Sixes	RT 294D	F & R	8.00
		MERCURY			
RT 1005A	$ 4.35 Set	1949	RT 284-7D	F & R	$ 8.00
RT 1005A	4.35 Set	1948-41	RT 1167D RS 1167D	F & R F & R	8.00 5.25
RT-M 955B RTS 955B	2.05 Set 4.00 Set	1940-39	RT 1167D RS 1167D	F & R F & R	8.00 5.25
		MONARCH			
RT 1005A	$ 4.35 Set	1949	RT 284-7D	F & R	$ 8.00
RT 1005A	4.35 Set	1948-46	RT 1167D RS 1167D	F & R F & R	8.00 5.25
		NASH			
RT 821B	$ 4.75 Set	1949, 4940, "600"	RT 1221	F & R	$ 8.75
RT 1008A	4.75 Set	1949, 4960 Amb., 1948-46, 4660 Amb.	RT 237D	F & R	8.45
RT 821B	4.75 Set	1946, 4640 Amb. 600	RT 2011D	F & R	6.55
RT 821B	4.75 Set	1942-41, 4240, 4130 Amb. 600	RT 2011D	F & R	6.55
RT 1008A	4.75 Set	1942-41, 4160, Amb. 6; 4180 Amb. 8	RT 237D	F & R	8.45
RT 993A	5.75 Set	1942-41, Amb. 6 (Fluid Coupling only)	RT 237D	F & R	8.45
ST 900 or ST 991B	3.40 each 2.90 each	1940, 4010 Lafayette 6	RT 237D	F & R	8.45
RT 1008A	$ 4.75 Set	1940, 4020 Amb. 6	RT 237D	F & R	$ 8.45
RT 1007A or RT 953C	6.65 Set 4.85 Set	1940, 4080 Amb. 8	RT 277D	F & R	11.05
RT 1057C or RT 1057B	7.75 Set 6.75 Set	1939, 3920 Amb. 6 1938, 3820 Amb. 6 1937, 3720 Amb. 6	RT 237D RT 237D RT 237D	F & R F & R F & R	8.45 8.45 8.45
RT 991A or RT 991	6.40 Set 6.00 Set	1938, 3810 Lafayette Series "H" 1937, 3710 Lafayette "400"	RT 237D RT 237D	F & R F & R	8.45 8.45
RT 1057C or RT 1057B	7.75 Set 6.75 Set	1939, 3980 Amb. 8 1938, 3880 Amb. 8 1937, 3780 Amb. 8	RT 277D RT 277D RT 277D	F & R F & R F & R	11.05 11.05 11.05

YOU CAN BE SURE WITH PROVEN PRODUCTS.

FERODO BRAKE AND CLUTCH SETS

Canadian and American passenger Cars

CLUTCH FACINGS		YEAR AND MAKE	BRAKE LININGS		
Ferodo No.	List		Ferodo Set No.	Brake Location	List per set
		NASH (Cont'd.)			
ST 991B	3.35 each	1939, 3910 Lafayette Spec. & Del. Series	RT 1166	F & R	10.85
RT 991A or RT 991	6.40 Set 6.00 Set	1938, 3810 Lafayette Series "L" 1937, 3710 Lafayette "400"	RT 1166 RT 1166	F & R F & R	10.85 10.85
		OLDSMOBILE			
No Facing Used		1949, 88, 98 (½ Set)	RT 2025 RT 2006	F R	$ 6.00 8.55
RT 1008A RT 993	$ 4.75 Set 5.75 Set	1949-46, 6 cyl. Series 35, 36) Series 66, Special 6; Series 76, Dynam. 6 1942 Series 68, Special 8	RT 292-6D	F & R	8.85
RT 1008A	4.75 Set	1948-42, Series 78, Dynamic 8, Series 98, Custom 8 (½ Set)	RT 2015D RT 2006D	F R	5.75 8.55
RT 993	5.75 Set	1941, G41 Series 76, Dynamic 6, H41 Series 96, Custom 6	RT 2006D	F & R	8.55
RT 1008A	4.75 Set	1941, J41 Series 78, Dynamic 8, L41 Series 98, Custom 8 1940, 90 (L40) 8 cyl.	RT 2006D	F & R	8.55
RT 993	5.75 Set	1942-39, 3500, 3600 (6 cyl.)	RT 653D RS 653D	F & R F & R	8.10 6.10
RT 993	5.75 Set	1940, 35, 36 (some early)	RT 292D	F & R	8.85
RT 1008A	$ 4.75 Set	1939, 80 (L-39), 8 cyl.; 70 (G-39), 6 cyl. (½ Set)	RT 2000D RT 286D	F R	$ 3.85 8.00
RT 991	6.00 Set	1938-37, 6 cyl., 3600	RT 653D RS 653D	F & R F & R	8.10 6.10
		PACKARD			
RT 1005A	$ 4.35	1949, 2301, 2331 (8 cyl.) 1948, 2201, 2211 (8 cyl.)	RT 2003	F & R	$ 4.25
ST 1087		1949, 2302, 2332 (8 cyl.) 1948, 2202, 2232 (8 cyl.)	RT 2003	F & R	4.25
ST 1087		1949, 2322 (8) 1948, 2222 (8)	RT 221 RT 220	F R	5.90 5.35
ST 1174		1949, 2306, 2333 1948, 2206, 2233	RT 221 RT 220	F R	5.90 5.35
ST 1174		1949, 2313 Cust. Comm.	RT 221 RT 234	F R	5.90 6.60
ST 1174		1948, 2213, Cust. Comm. , 2226 Custom	RT 234	F & R	6.60
ST 1169	4.90 each	1947-46, Super 8, 2123, 2126 (148" w.b.) (2 Sets)	RT 234	F & R	6.60
ST 1169	4.90 each	1947-46, Super 8, 2103, 2106 (127" w.b.)	RT 221 RT 220	F R	5.90 5.35
RT 990	6.90 Set	1947-46, 2100 (Clipper), 1945-42, 2000, 2020	RT 2003 RT 2002D	F R	4.25 4.05
RT 1057	6.70 Set	1948-46, 2101, 2111 Super (Clippers) (2 Sets)	RT 2003	F & R	4.25
RT 1057	6.70 Set	1945-42, 2001, 2021; 1941, 1901, 120 Eight (2 Sets)	RT 2003	F & R	4.25
ST 1169	4.90 each	1945-42, 2023; 1941, 1903, 160 Super 8, 1906, 180 Custom Super 8 (2 Sets)	RT 220	F & R	5.35
ST 1169	4.90 each	1945-42, 2004, 2005, 2007, 2008	RT 299	F & R	11.95

FERODO BRAKE AND CLUTCH SETS

Canadian and American passenger Cars

CLUTCH FACINGS		YEAR AND MAKE	BRAKE LININGS		
Ferodo No.	List		Ferodo Set No.	Brake Location	List per set
		PACKARD (Cont'd.)			
ST 1169	$ 4.90 each	1945-42, 2003, 2006	RT 221 RT 220	F R	$ 5.90 5.35
ST 1169	4.90 each	1941, 1904-5, 160 Super 8, 1907-8, 180 Cust. Sup. 8	RT 299	F & R	11.95
ST 1169	4.90 each	1941, 1903A Comm.; 1940, 1803A Comm. (2 Sets)	RT 234	F & R	6.60
RT 990	6.90 Set	1941, 1900, 110 Six (2 Sets)	RT 2002D	F & R	4.05
RT 990 or RT 985A or RT 1008A	6.90 Set 6.50 Set 4.75 Set	1940, 1800, 110 Six (2 Sets) Some early	RT 2002D RT 284D	F & R F & R	4.05 8.20
RT 1057 or RT 1057B	6.70 Set 6.75 Set	1940, 1801, 120 Eight (2 Sets) Some early	RT 2003 RT 253A	F & R F & R	4.25 9.80
M 1169 or ST 1169 or ST 1169A	3.20 each 4.90 each 4.55 each	1940, 1803, 160 Super Eight, 180 Custom. Sup. Eight (2 Sets)	RT 220	F & R	5.35
M 1169 or ST 1169 or RT 1169A	2.95 each 4.90 each 4.55 each	1940, 1804-5, 160 Sup. Eight, 1807-8, 180 Cust. Sup. Eight	RT 299	F & R	11.95
		PLYMOUTH			
RT 993A	$ 5.75 Set	1949-47, P15. (Some 1946) P17 P18	RT 1106AD	F & R	$ 7.70
RT 993A	5.75 Set	1946, P15. Some models	RT 145AD	F & R	7.70
RT 993A	5.75 Set	1942-40, P14, P12, P11, P10, P9	RT 1137D RS 1137D	F & R F & R	6.85 4.85
RT 985A	6.50 Set	1939-38, P8, P7, P6, P5	RT 1137D RS 1137D	F & R F & R	6.85 4.85
RT 1057B	6.75 Set	1937, P3, P4 (½ Set) (½ Set) (½ Set) (½ Set)	RT 145D RS 145D RT 1137D RS 1137D	F F R R	7.95 5.50 6.85 4.85
RT 985	6.50 Set	1936, P1, P2 (After July 1 36) (½ Set) (½ Set) (½ Set) (½ Set)	RT 145D RS 145D RT 1137D RS 1137D	F F R R	7.95 5.50 6.85 4.85
RT 985	6.50 Set	1936, P1, P2 (Before July 1 36) 1935, PJ, PJX	RT 145D RS 145D	F & R F & R	7.95 5.50
RT 980	4.60 Set	1934, PF, Standard PG	Use RM	F & R	
RT 980	4.60 Set	1934 DeLuxe PE	RS 195	F & R	4.90
RT 955A	3.10 Set	1933 PC (After Car 1817101)	Use RM	F & R	
RT 955A	3.10 Set	1933 PC (Before Car 1817101)	Use RM	F & R	
		1933 Deluxe PD			
RT 862B	2.65 Set	1932 PB (Before June 23 32) 1931, PA	RS 104	F & R	5.05
RT 955A	3.10 Set	1932, PB (Before June 23 32)	RS 104	F & R	5.05
S877A-8A	3.55 each	1931, 30U (Early 1931)	RS 104	F & R	5.05
		PONTIAC			
RT 990A	$ 6.90 Set	1949-46, 25, 26, 27, 28, 1942, 27, Torpedo 8	RT 292-6D	F & R	$ 8.85
RT 990A	6.90 Set	1949, 2000 2200 Bonded 1948-46, 2000, 2200	RT 653 RT 653D RS 653D	F & R F & R F & R	8.10 8.10 6.10

EVERY ORDER IS A RUSH ORDER WITH US.

FERODO BRAKE AND CLUTCH SETS

Canadian and American passenger Cars.

CLUTCH FACINGS		YEAR AND MAKE	BRAKE LININGS		
Ferodo No.	List		Ferodo Set No.	Brake Location	List per set
		PONTIAC (Cont'd.)			
RT 999	5.50 Set	1942, 25 Torpedo 6 (½ Set) (½ Set)	RT 2006D RT 292D	F R	8.55 8.85
RT 999	5.50 Set	1942-41, 2000, 2200, 2400, 2500	RT 653D RS 653D	F & R F & R	8.10 6.10
RT 999	5.50 Set	1941, 24 Custom 6, 25 Deluxe 6, 26 Streamliner 6	RT 292D	F & R	8.85
RT 990A	6.90 Set	1941, 27 Deluxe 8, 28, 29	RT 292D	F & R	8.85
RT 1057	6.70 Set	1941, Taxicab	RT 292D	F & R	8.85
RT 909A-B	4.95 Set	1940, 2200, 2500	RT 653D RS 653D	F & R F & R	8.10 6.10
RT 985A	6.50 Set	1940, 2500, 6 cyl.	RT 292D	F & R	8.85
RT 902A or RT 985A	4.00 Set 6.50 Set	1940, 25 Special 6, 26 Deluxe 6	RT 292D	F & R	5.88
ST 995 or RT 985A	$ 1.80 each 6.50 Set	1940, 28 Deluxe 8, 29 Torpedo 8	RT 292D	F & R	$ 8.85
RT 905D	2.80 Set	1939-37, 22, 25, 6 cyl.	RT 653D RS 653D	F & R F & R	8.10 6.10
RT 902A	4.00 Set	1939, 25 Quality 6, 26 Deluxe 6	RT 292D	F & R	8.85
ST 995	1.80 each	1939, 28 Deluxe 8	RT 292D	F & R	8.85
RT 1057	6.70 Set	1938, 38-26 DA Six, 38-28 DA Eight 1937-36 Deluxe 6 & 8 cyl.	RT 286D	F & R	8.00
ST 968B	2.75 each	1935, Six, Eight	RT 286D	F & R	8.00
ST 968B	2.75 each	1934, 8 cyl.	RT 253D	F & R	9.80
W 1037B or ST 968B	1.80 each 2.75 each	1933, 8 cyl.	RT 614D RS 614D	F & R F & R	6.20 3.90
		STUDEBAKER			
RT 993A	$ 5.75 Set	1948-47, 14A, 15A Comm.	RT 1216D	F & R	$ 8.80
RT 821B	4.75 Set	1948-47, 7G, 6G Champions	RT 1215D	F & R	7.30
RT 821B	4.75 Set	1946, 3G; 1941, 5G Champions	RT 1168D	F & R	6.60
RT 990	6.90 Set	1942, President; 1941, President 7C	RT 1160	F & R	9.35
RT 736A	4.75 Set	1942-41, Champion; 1940, 2G; 1939, G	RT 1168D	F & R	6.60
RT 993A	5.75 Set	1942-41 Commander; 1941 Commander 11A; 1940 Commander 10A	RT 1161D	F & R	8.55
RT 990 or RT 1057B	6.90 Set 6.75 Set	1940, President 6C	RT 1160	F & R	9.35
RT 990	6.90 Set	1939, President 5C' 1938, President 4C	RT 1160	F & R	9.35
RT 985	6.50 Set	1939, Comm. 9A; 1938, Comm. 8A, 7A	RT 1161D	F & R	8.55
RT 1056	6.70 Set	1937, President	Use RM	F & R	
		WILLYS			
RT 884	$ 3.85 Set	1949-48, 6 pass. Station Sedan, 663 1948-46, 4-63 Station Wagon	RT 1220	F & R	$ 6.60
RT 884	3.85 Set	1947-45, CJ-2A	RT 2011D	F & R	6.55
RT 736A or RT 736C	4.75 Set 4.75 Set	1941, Americar	RT 2011D	F & R	6.55
RT 736C	4.75 Set	1942, Americar (442), Station Wagon	RT 2011D	F & R	6.55
RT 736A	4.75 Set	1942-41, MB. MA: 1940 Speedway,	RT 2011D	F & R	6.55

D. ACKLAND & SON, Limited
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FERODO BRAKE AND CLUTCH SETS

English passenger Cars

CLUTCH FACINGS		YEAR AND MAKE	BRAKE LININGS		
Ferodo No.	List	AUSTIN	Ferodo Set No.	Brake Location	List per set
B6/WO/2	$ 2.85	1949-47, A40, Devon, Dorset	RT 15D	F & R	$ 6.90
B1/VA/1	3.25	1947, Twelve, 2 Sets	RT 10D	F & R	5.10
R28B	3.40	1946-45, (15.9 h.p.), Sixteen.	RT 21D RT 10D	F R	5.65 5.10
B3/H1/2	2.95	1946-45, (9.9 h.p.), Ten Saloon.	RT 15D	F & R	6.90
9/AT/1	5.35	1949-47, (26.9 h.p.), Sheerline, Princess.	RT 29	F & R	15.20
R28B	3.40	1946-45, (12 h.p.), Twelve & Taxi. (2 sets)	RT 10D	F & R	5.10
J22C	2.40	1946-40, (7.99 h.p.), Eight.	RT 11	F & R	6.50
B6/NB/1	3.40	1946-40, (9.9 h.p.), Ten Utility.	RT 15D	F & R	6.90
R28B	3.40	1946-39, Fourteen. 1945-40, (11.9 h.p.), Twelve-Four.	RT 14D	F & R	8.25
J22C	2.40	1943-40, (7.99 h.p.), Big Seven & Eight.	RT 12D	F & R	5.70
B3/H1/2	2.95	1940-38, (7.99 h.p.), Big Seven.	RT 12D	F & R	5.70
2/CH/4	3.80	1940-37, (11.9 h.p.), Twelve.	RT 14D	F & R	8.25
B3/H1/2	2.95	1940-38, (9.9 h.p.), Ten, (Girling Steel Shoe Unmarked).	RT 13D	F & R	6.20
B3/H1/2	2.95	1940-38, (9.9 h.p.), Ten, (Girling Steel Shoe Marked).	RT 15D	F & R	6.90
B3/H1/2	2.95	1939-37, (7.8 h.p.), Seven.	RT 12D	F & R	5.70
R28B or B6/NB/1	3.40 3.40	1938-37, (9.9 h.p.), Ten.	RT 13D	F & R	6.20
J21C or B7/NB/1	2.85 2.90	1937, (7.8 h.p.), Seven.	RT 12D	F & R	5.70
		FORD			
J20C	$ 3.35	1949-46, Anglia, Prefect	RT 30D	F & R	$ 7.80
		HILLMAN			
B3/H1/2	$ 2.95	1949-47, Minx (9.8 H.P.), 7/8" Centers 1" Centers	RT 31D RT 31AD	F & R F & R	$ 7.00 7.00
B3/H1/2	2.95	1947-34, (9.8 h.p.), Minx, WO Minx Utility Van.	RT 6D	F & R	6.70
B3/H1/2	2.95	1940, (9.8 h.p.), Minx.	RT 6D	F & R	6.70
J21C	2.85	1939, (9.8 h.p.), Convertible Van & Minx Saloon.	RT 6D	F & R	6.70
		MORRIS			
6/MO/2	$ 2.35	1949, Morris Minor	RT 34D	F & R	
J22C	2.40	1948-39, (8 h.p.), Series "E" Eight.	RT 16D	F & R	$ 6.15
B3/H1/2	2.95	1946-35, (9.99 h.p.), Ten-Four Series 11, 111, M.	RT 17D	F & R	7.90
B1/VA/1	3.25	1942-38, (11.98 h.p.), Twelve-Four, Series 11 and 111.	RT 17D	F & R	7.90
J22C	2.40	1939-35, (8 h.p.), Eight, Series 1 and 11.	RT 16D	F & R	6.15
J22C	2.40	1938-35, Eight.			
		VAUXHALL			
B3/HI/2	$ 2.95	1949-48, (12 H.P.) Wyvern, Velox	RT 33D	F & R	$ 9.00

ACKLAND-FERODO BRAKE SHOP

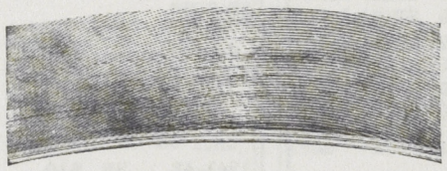


This is the Machine that handles our Brake Grinding Operation.

A Complete Brake Service

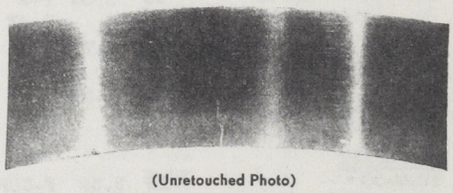
- **RIVETTING.**
- **BONDING.**
- **DRUM GRINDING.**
- **EXCHANGE SERVICE ON POPULAR CARS.**
- **WE CAN HANDLE ANY JOB—ANY DESCRIPTION OR SIZE.**

HERE'S THE DIFFERENCE BETWEEN AN ORDINARY JOB . .



Drum at left has been turned, *but not ground.* Turning marks will score new linings. Readjustments will often be needed. Shoes will be jammed back and forth against backing plate and drum web . . making drums rumble. Pedal action will be hard . . brake action unsafe. Linings will soon wear out. *Customers will be dissatisfied.*

. . AND A VAN NORMAN JOB



(Unretouched Photo)

Drum at right has been finished . . . turning marks ground off. Adjustments will be easy . . . pedal action easy . . . brake action safe, silent. Purchaser gets full value from new linings. Quality work is consistently produced, which means more satisfied customers. Van Norman's 303 always does this kind of job.

ONLY THE FINEST EQUIPMENT AND WORKMEN EMPLOYED IN OUR SHOPS.

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ON OUR EXCHANGE SERVICE — ORDER THE SET OF SHOES YOU REQUIRE IN RIVETED OR BONDED — RETURN THE OLD SHOES WHEN THE JOB IS FINISHED.

• WRITE FOR A COMPLETE PRICE LIST
ON ALL OPERATIONS INCLUDING EXCHANGE SET UPS.

D. ACKLAND & SON, Limited

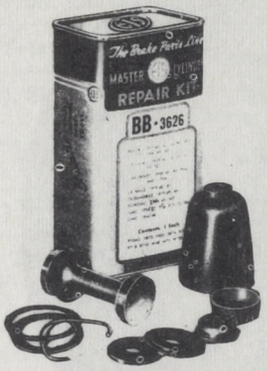
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MASTER CYLINDER KITS

WHEEL CYLINDER KITS

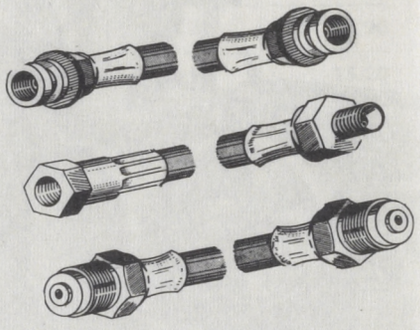


Contains Cups and Boots only. Pistons are not packed in these units.



Contains in addition to major parts, Valve Seats, Head Gaskets, Springs etc., to make a complete job possible.

BRAKE HOSES



EIS PASSENGER CAR SPECIFICATIONS

YEAR	MODEL	MASTER CYL. KIT	LIST PRICE	WHEEL CYL. KIT	LIST PRICE	BRAKE HOSE	LIST PRICE
BUICK							
1950	40-50-70	BB	2.50	F-AJ	1.00	SP984	1.85
				R-C	1.00	SP989	1.85
1942-49	40-50-60-70	BB	2.50	F-AJ	1.00	SP292	1.85
				R-C	1.00	SP793	1.85
1940-41	40-50-60-70	BB	2.50	F-AE	1.00	SP292	1.85
				R-C	1.00	SP793	1.85
1939	40-60	BB	2.50	F-AE	1.00	SP292	1.85
				R-C	1.00	SP178	1.75
1940	80-90	JJ	3.00	F-J	1.00	SP183	1.85
				R-AF	1.10	SP793	1.85
1937-39	80-90	JJ	3.00	F-J	1.00	SP183	1.85
				R-AF	1.10	SP178	1.75
1936	40	AA	2.75	F-E	1.00	SP183	1.85
				R-C	1.00	SP178	1.75
1937	40	BB	2.50	F-E	1.00	SP296	1.85
(Before No. 3034187)				R-C	1.00	SP178	1.75
CHEVROLET							
1949-50		BB	2.50	F-CDP	1.60	SP183	1.85
				R-AS-P	1.50	SP183	1.85
1936-48	FD	BB	2.50	F-AU-P	1.60	SP183	1.85
				R-AT-P	1.50	SP183	1.85
1936	FC	BB	2.50	F-AS-P	1.50	SP183	1.85
				R-AR-P	1.50	SP183	1.85
1936	FA	BB	2.50	F-AU-P	1.60	SP183	1.85
				F-AR-P	1.50	SP183	1.85
CHRYSLER							
1950	C-50	GGG	2.75	F-CE	1.20	SP989	1.85
				R-CF	1.20	SP790	1.85
1950	C-48 Town Sedan. C-49	HHH	2.75	F-CP-A	2.50	SP890	1.85
				R-CP-A	2.50	SP790	1.85
1950	C-48 and 7 Passenger.	GGG	2.75	F-CP-A	2.50	SP890	1.85
				R-CP-A	2.50	SP790	1.85
1949	C-45--C-46 Without Booster	FFF	2.75	F-CP-A	2.50	SP967	1.85
				R-CP-A	2.50	SP790	1.85
1949	C-47	UU	2.75	F-CE	1.20	SP967	1.85
				R-CF	1.20	SP790	1.85
1946-48	C-39	UU	2.75	F-CP-A	2.50	SP967	1.85
				R-CP-A	2.50	SP790	1.85
1946-48	C-38	UU	2.75	F-CP-A	2.50	SP890	1.85
				R-CP-A	2.50	SP790	1.85
1941-42	C-28 C-34 (Not 7 Passenger)	UU	2.75	F-S	1.10	SP292	1.85
				R-BH	1.10	SP183	1.85
1940	C-26 C-27	SS	2.65	F-BJ	1.20	SP292	1.85
				R-BJ	1.20	SP183	1.85
1940	C-25	KK	2.75	F-S	1.10	SP292	1.85
				R-BH	1.10	SP183	1.85
1939	C-22 C-23	KK	2.75	F-S	1.10	SP292	1.85
				R-T	1.00	SP183	1.85

YEAR	MODEL	MASTER CYL. KIT	LIST PRICE	WHEEL CYL. KIT	LIST PRICE	BRAKE HOSE	LIST PRICE
CHRYSLER CONT'D							
1937-39	C-14,C-15, C-16,C-18,C-19,C-20, C-24	KK	2.75	F-S	1.10	SP191	1.85
				R-T	1.00	SP191	1.85
1935-37	C-1,C-2,C-3, C-9,C-10,C-11,C-17	EE	2.55	F-S	1.10	SP183	1.85
				R-BH	1.10	SP183	1.85
1935-36	CZ,C-6,C-7 C-8	EE	2.55	F-S	1.10	SP191	1.85
				R-T	1.00	SP191	1.85
DE SOTO							
1950	S14	GGG	2.75	F-CP-A	2.50	SP890	1.85
(Not 7 Passenger)				R-CP-A	2.50	SP790	1.85
1948-49	S11, S13	UU	2.75	F-CP-A	2.50	SP967	1.85
				R-CP-A	2.50	SP790	1.85
1946-47	S11	UU	2.75	F-CP-A	2.50	SP890	1.85
				R-CP-A	2.50	SP790	1.85
1941-42	S8, S10	UU	2.75	F-S	1.10	SP292	1.85
(Not 7 Passenger)				R-BH	1.10	SP183	1.85
1940	All	KK	2.75	F-S	1.10	SP292	1.85
				R-BH	1.10	SP183	1.85
1939	All	KK	2.75	F-S	1.10	SP292	1.85
				R-T	1.00	SP183	1.85
1938	All	KK	2.75	F-S	1.10	SP183	1.85
				R-T	1.00	SP183	1.85
1935-36	SG, S2	EE	2.55	F-S	1.10	SP183	1.85
				R-BH	1.10	SP183	1.85
1936-35	S1, SF	EE	2.55	F-S	1.10	SP191	1.85
				R-T	1.00	SP191	1.85
DODGE							
1950	D34	HHH	2.75	F-CP-A	2.50	SP890	1.85
				R-CP-A	2.50	SP790	1.85
1950	D33	HHH	2.75	F-CP-A	2.50	SP967	1.85
				R-CP-A	2.50	SP790	1.85
1948-49	D24,D29,D30	UU	2.75	F-CP-A	2.50	SP967	1.85
(Not 7 Passenger)				R-CP-A	2.50	SP790	1.85
1946-47	D24	UU	2.75	F-CP-A	2.50	SP890	1.85
				R-CP-A	2.50	SP790	1.85
1941-42	D19,D22	UU	2.75	F-S	1.10	SP292	1.85
(Not 7 Passenger)				R-BH	1.10	SP183	1.85
1940	All	KK	2.75	F-S	1.10	SP292	1.85
				R-BH	1.10	SP183	1.85
1939	All	KK	2.75	F-S	1.10	SP292	1.85
				R-T	1.00	SP183	1.85
1937-38	ALL	KK	2.75	F-S	1.10	SP191	1.85
				R-T	1.00	SP191	1.85
1935-36	DZ, DU	EE	2.55	F-S	1.10	SP191	1.85
				R-T	1.00	SP191	1.85
1933-34	DP6,DR,DS	EE	2.55	F-K	1.00	SP183	1.85
				R-K	1.00	SP183	1.85

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

EIS PASSENGER CAR SPECIFICATIONS

YEAR	MODEL	MASTER CYL. KIT	LIST PRICE	WHEEL CYL. KIT	LIST PRICE	BRAKE HOSE	LIST PRICE
FORD							
1949-50	ALL	ZZ	2.50	F-AH	.90	SP949	1.85
				R-A	1.00	SP948	1.85
1940-48		QQ	2.10	F-BS	.95	SP750	1.85
				R-BC	.75	SP753	1.35
1939-41		QQ	2.10	F-BA	.80	SP750	1.85
				R-BC	.75	SP753	1.35
1932-38		QQ	2.10	F-BS	.95	SP750	1.85
				R-BC	.75	SP753	1.35
HUDSON							
1948-49	All	00	2.45	F-AH	.90	SP894	1.85
				R-B	1.00	SP894	1.85
1941		TT	2.75	F-C	1.00	SP296	1.85
				R-C	1.00	SP192	1.85
1940		TT	2.75	F-AX	1.00	SP296	1.85
				R-AX	1.00	SP192	1.85
(In ordering 1940 and 1941 please specify serial Number.							
1938-39	112	AA	2.75	F-AX	1.00	SP192	1.85
				R-AX	1.00	SP192	1.85
1936-39	All except Model 112	AA	2.75	F-C	1.00	SP192	1.85
				R-C	1.00	SP192	1.85
MERCURY							
1949-50	All	XX	2.70	F-AH	.90	SP947	1.85
				R-B	1.00	SP950	1.85
1942-48	All	QQ	2.10	F-BS	.95	SP750	1.85
				R-BC	.75	SP753	1.35
1939-41	All	QQ	2.10	F-BA	.80	SP750	1.85
				R-BC	.75	SP753	1.35
KAISER FRAZER							
1946-48	with cast Iron M.C.	WW	2.45	F-BC	.75	SP786	1.85
				R-BG	1.00	SP893	1.85
1948-49	to # 33061 With Aluminum M.C.	NN	2.45	F-BC	.75	SP786	1.85
				R-BC	.75	SP893	1.85
1949	All after #33061	NN	2.45	F-BC	.75	SP947	1.85
				R-BF	1.00	SP893	1.85
NASH							
1949	60	CC	2.55	F-E	1.00	SP787	1.85
(after # 532570)				R-B	1.00	SP750	1.85
1949	40	RR	2.30	F-BG	1.00	SP787	1.85
(after 307623)				R-BF	1.00	SP750	1.85
NASH							
1949-50	60						
(1949 to # 532570)		CC	2.55	F-E	1.00	SP787	1.85
				R-C	1.00	SP750	1.85
1949	40						
(after 307623)		RR	2.30	F-BG	1.00	SP787	1.85
				R-BF	1.00	SP750	1.85
1949	60						
(After # 532570)		CC	2.55	F-E	1.00	SP787	1.85
				R-B	1.00	SP750	1.85
1949-50	40	RR	2.30	F-BG	1.00	SP871	1.85
				R-BF	1.00	SP894	1.85
1948	40	RR	2.30	F-BG	1.00	SP786	1.85
				R-BF	1.00	SP787	1.85
1948	60	CC	2.55	F-E	1.00	SP296	1.85
				R-C	1.00	SP183	1.85
1941-47	40, 4140	RR	2.30	F-BG	1.00	SP786	1.85
				R-BF	1.00	SP786	1.85
1938-40	All	CC	2.55	F-E	1.00	SP183	1.85
				R-C	1.00	SP183	1.85
1936-37	40, 4A from 12894, 3720 to 8719, 3780	CC	2.55	F-E	1.00	SP183	1.85
				R-C	1.00	SP183	1.85
1937	3720 from 8919	CC	2.55	F-M	1.00	SP183	1.85
				R-Z	1.00	SP183	1.85
1935-36	40, 40A,to 12894	CC	2.55	F-W	1.10	SP183	1.85
				R-W	1.10	SP183	1.85
1935-36	20-80	AA	2.75	F-E	1.00	SP183	1.85
				R-C	1.00	SP183	1.85
OLDSMOBILE							
1950	76	BB	2.50	F-AJ	1.00	SP992	1.85
				R-C	1.00	SP183	1.85
1950	88-98	BB	2.50	F-AE	1.00	SP992	1.85
				R-B	1.00	SP183	1.85
1949	88	BB	2.50	F-AE	1.00	SP750	1.85
				R-B	1.00	SP183	1.85
1949	76-98	BB	2.50	F-AJ	1.00	SP750	1.85
				R-C	1.00	SP183	1.85

YEAR	MODEL	MASTER CYL. KIT	LIST PRICE	WHEEL CYL. KIT	LIST PRICE	BRAKE HOSE	LIST PRICE
OLDSMOBILE CONT'D.							
1942-48	All	BB	2.50	F-AJ	1.00	SP750	1.85
				R-C	1.00	SP183	1.85
1941	All	BB	2.50	F-AE	1.00	SP750	1.85
				R-C	1.00	SP183	1.85
1940	F40,G40,L40	BB	2.50	F-AE	1.00	SP750	1.85
				R-C	1.00	SP296	1.85
1939	All	BB	2.50	F-AE	1.00	SP750	1.85
				R-C	1.00	SP296	1.85
1937-38	ALL	AA	2.75	F-AE	1.00	SP296	1.85
				R-C	1.00	SP296	1.85
1935-36	All	AA	2.75	F-C	1.00	SP183	1.85
				R-C	1.00	SP183	1.85
PLYMOUTH							
1950	P19, P20	HHH	2.75	F-CP-A	2.50	SP967	1.85
				R-CP-A	2.50	SP790	1.85
1949	P17, P18	UU	2.75	F-CP-A	2.50	SP967	1.85
				R-CP-A	2.50	SP790	1.85
1946-48	All	UU	2.75	F-CP-A	2.50	SP890	1.85
				R-CP-A	2.50	SP790	1.85
1942	All	UU	2.75	F-S	1.10	SP292	1.85
				R-BH	1.10	SP183	1.85
1941	P11, P12	KK	2.75	F-S	1.10	SP292	1.85
				R-T	1.00	SP183	1.85
1940	PT50, PT57, PT81, PT105	EE	2.55	F-J	1.15	SP192	1.85
				R-S	1.10	SP192	1.85
1939	All	KK	2.75	F-S	1.10	SP292	1.85
				R-T	1.00	SP183	1.85
1937-38	All except PT50, PT57, PT81, PT105	KK	2.75	F-S	1.10	SP191	1.85
				R-T	1.00	SP191	1.85
1937	PT50, PT57, PT81, PT105	EE	2.55	F-J	1.15	SP192	1.85
				R-S	1.10	SP192	1.85
1935-36	All	EE	2.55	F-S	1.10	SP191	1.85
				R-T	1.00	SP191	1.85
1933-34	All	EE	2.55	F-K	1.00	SP198	1.85
				R-F	1.00	SP198	1.85
PONTIAC							
1949-50	All	BB	2.50	F-E	1.00	SP794	1.75
				R-A	1.00	SP183	1.85
1942-48	All	BB	2.50	F-E	1.00	SP292	1.85
				R-B	1.00	SP183	1.85
1937-41	All	BB	2.50	F-C	1.00	SP292	1.85
				R-B	1.00	SP183	1.85
1936 (Deluxe 6 & 8)		BB	2.50	F-C	1.00	SP183	1.85
				R-B	1.00	SP183	1.85
1935		AA	2.75	F-B	1.00	SP183	1.85
				R-B	1.00	SP183	1.85
STUDEBAKER							
1950 17A	Commander	NN	2.45	F-BG	1.00	SP786	1.85
				R-BF	1.00	SP997	1.85
1950 9G	Champion	NN	2.45	F-BG	1.00	SP786	1.85
				R-BF	1.00	SP786	1.85
1947-49	Champion & Commander	NN	2.45	F-BG	1.00	SP894	1.85
				R-BF	1.00	SP894	1.85
(On 1947-49 Models, specify whether iron or aluminum cylinders)							
1939-46	Champion	RR	2.30	F-BG	1.00	SP786	1.85
				R-BF	1.00	SP786	1.85
1942-46	All models except Champion	CC	2.55	F-U	1.00	SP857	1.85
				R-Z	1.00	SP790	1.85
1941	All models except Champion	CC	2.55	F-U	1.00	SP790	1.85
				R-Z	1.00	SP790	1.85
1936-38	All	CC	2.55	F-U	1.00	SP192	1.85
				R-Z	1.00	SP192	1.85
WILLY'S							
1947-49	Station Wagon Aluminum Cylinder	NN	2.45	F-BG	1.00	SP786	1.85
				R-BF	1.00	SP786	1.85
1949	CJ, 2A	RR	2.30	F-BG	1.00	SP867	1.75
				R-BY	1.00	SP786	1.85
1946-48	Jeep	RR	2.30	F-BG	1.00	SP867	1.75
				R-BY	1.00	SP786	1.85
1942	All except Jeep	RR	2.30	F-BG	1.00	SP786	1.85
				R-BF	1.00	SP786	1.85
1941	MA Early	RR	2.30	F-BG	1.00	SP786	1.85
				R-BF	1.00	SP786	1.85
1939-41		RR	2.30	F-BG	1.00	SP192	1.85
				R-BF	1.00	SP192	1.85

MB Models in 1942-3 use two sizes of Cylinders. Order for 3/4 or 7/8 Cylinder.

WE ALSO CARRY A COMPLETE STOCK OF HYDRAULIC BRAKE PARTS FOR ALL MAKES OF TRUCKS. A COMPLETE CATALOGUE LISTING ALL PARTS WILL BE SENT TO YOU ON REQUEST.

EIS BRAKE PARTS and ACCESSORIES

CUPS



Size	Part No.	List
3/4	R76	.25
7/8	R81	.30
15/16	R93	.30
1	R101	.30
1 1/16	R111	.25
1 3/32	R114	.30
1 1/8	R116	.30
1 1/8	R116H	.25
1 3/16	R120	.30
1 1/4	R121	.30
1 5/16	R956	.30
1 3/8	R131	.30
1 1/2	R151	.35
1 3/4	R171	.40
2	R201	.35

MAIN CUPS



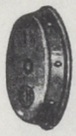
Size Ins.	Part No.	List
1	R104G	.35
1	R978G	.35
1 1/16	R740G	.20
1 1/8	R119G	.30
1 1/8	R782G	.35
1 1/4	R124G	.30
1 1/4	R128G	.30
1 1/2	R154G	.35
1 1/2	R154A	.35
1 3/4	R174G	.35
1 3/4	R174A	.35
2	R208	.45

SECONDARY CUPS



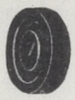
Size Ins.	Part No.	List
1	R103	.30
1 1/16	R741	.20
1 1/8	R118	.30
1 1/8	R781	.35
1 1/8	R935	.30
1 1/4	R123	.30
1 3/4	R175	.35
1	R977	.35
1 1/8	R781	.35

CUP EXPANDERS



Size Ins.	Part No.	List
3/4	W705	.20
7/8	W706	.20
15/16	W707	.20
1	W708	.20
1 1/16	W709	.20
1 3/32	W710	.20
1 1/8	W711	.20
1 3/16	W712	.20
1 1/4	W713	.20
1 3/8	W714	.20
1 1/2	W715	.30
1 3/4	W716	.30
2	W717	.30

BOOTS



Size Ins.	Part No.	List
1	R725	.25
1	R785	.30
1	R106	.30
1 1/16	R106	.30
1 1/8	R117	.25
1 1/4	R132	.30
1 3/8	R132	.30
1 1/4	R133	.35
1 3/8	R133	.35
1 3/8	R160	.35
1 1/2	R160	.35
1 1/2	R162	.25
1 3/4	R173	.35
1 1/2	R173	.35

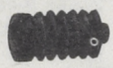
BOOTS



Size Ins.	Part No.	List
3/4	R77	.40
1 1/8	R115	.45



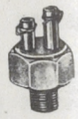
3/4" R78 .30



11/16	R844	.35
3/4	R845	.50

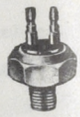
STOPLITE SWITCHES





K60 .55
K79 .85 K80 .90





K988
Mech. Type 1.10

K789 .60
K791 .90

PRESSURE BLEEDER

FOR HYDRAULIC BRAKES AND CONTROLS



A handy, quick-acting tool which simplifies bleeding and flushing brakes. One man can now do a quicker and better job than heretofore done by two men.

No Pumping Pedal • No Watching Fluid Level • No Double Work

Detects Leaks

Heavy Rugged Steel Construction Equipped With Swivel Casters and Automatic Fluid Shut-off.

Unit Is Furnished As Shown with T683, T684 and T698 Adaptor, T678 Elbow, 1 Combination Bleeder Hose and 6 Ft. Hose.

No wrenches are needed to hook up EIS Bleeders or Flushers
(Except Adaptor with Pipe Thread on Chrysler Made Cars)

3 SIMPLE COMBINATION ADAPTORS TAKE CARE OF PRACTICALLY ALL POPULAR CARS

BAKED GREEN FINISH

Special Needle Valve Shut-Off — No Drip — No Loss of Fluid
Car manufacturers recommend a complete change of fluid every 6 months. They also advise flushing the system.

Net Price $27.50

PRESSURE BLEEDER and FLUSHER



Flushing and refilling can be done quickly and made a profitable job with this tool. With the combination tank, flushing is simplified and merely takes a few minutes in addition to bleeding.

Stock No. T699D

Capacity 2½ Gal. Each Tank

Net Price $49.00

HYDRAULIC BRAKE CYLINDER HONES



For All Automotive Sizes ¾" to 2"
Will Handle All Straight and Stepbore Cylinders

- **Flexible Cable Driver** — Makes Honing of Wheel Cylinders on Cars Possible
- **Self Collapsing Stones Permit Removal of Hone Without Scratching Cylinder Wall**
- **Any Desired Stone Tension Obtainble** — Accessible Adjustment, No Need of Dismantling Hone
- **3 Sizes of Stones Interchangeable in 3 Bodies Take Care of All Diameters** — Easy Change of Stones

The EIS hone is of the 3 stone expansion type. Stone member being actuated upon by a flat resilient spring which in turn is forced into an expanding position by screw adjustment. Any tension from the lightest to the severest can readily be obtained.

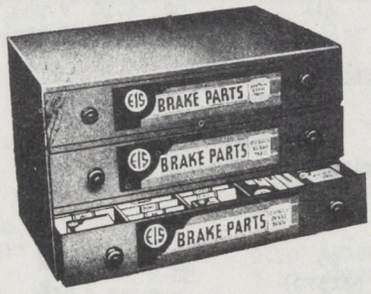
Two grits of stones are furnished. The coarser ones should be used for removing stock; with nominal tension they will remove about .001" per minute on the average master cylinder. Other diameters and cylinders proportionately. The fine stones are for polishing the walls which must be done in order to obtain a proper and hermetic hydraulic seal.

HONE SETS — PRICES ON APPLICATION

Stock No.		Size Range
H41	Complete set H31, H32, H33 bodies and 3 drivers; 1 set each R1, F2, R3, F4, R5, F6 stones.	¾" to 2"
H42	Small diameter set H31 body and driver, 1 set each R1, F2 stones.	¾" to 1"
H43	Popular size set H32 body and driver, 1 set each R3, F4, R5, F6 stones.	1" to 1½"
H44	Combination H42 and H43	¾" to 1½"
H45	Large diameter set H33 body and driver, 1 set each R3, F4, R5, F6 stones.	1½" to 2"
H46	Medium diameter set H32 and H33 body and driver, 1 set each R3, F4, R5, F6 stone	1" to 2"

All hone sets furnished complete with cleaning brush, stone dresser and extra springs.

PARTS ASSORTMENTS



A--205

A general fast moving parts assortment affords limited coverage for all popular cars.

292 PIECES---99 ITEMS
Packed in a 3 drawer metal cabinet.
Size 19 1/4" x 11 3/4" x 13"

Net Price $72.15

HOSE ASSORTMENTS



H403

Contains 1 each of the 10 most popular numbers

1—SP183	1—SP192	1—SP750	1—SP948	1—SP890
1—SP191	1—SP292	1—SP790	1—SP949	1—SP786

Net Price $12.60

H404

Contains 20 hoses (16 numbers). Will take care of practically all hose installations.

1—SP178	1—SP197	2—SP750	1—SP793
2—SP183	1—SP198	1—SP753	1—SP890
2—SP191	2—SP292	1—SP786	1—SP948
1—SP192	1—SP296	1—SP790	1—SP949

Net Price $23.35

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

McCORD OIL and GREASE SEALS

SPECIFICATIONS

CHEVROLET—PASS. & COMM.

Year Models	Location	McCord No.	Per Car	Mat'l
1941-49				
Pass., Sedan Delivery	FW	84260	2	MF
	RA	80030	2	ML
1941-48	Pr Sh	80113	1	ML
	TC	80095	1	ML
	St Gr	80071	1	ML
1946-48				
Commercial ½ Ton	FW	84260	2	MF
	RA	84070	2	ML
	Pr Sh	80113	1	ML
	TC	80095	1	ML
1946-48				
Commercial ¾ & 1 Ton	FW	84157	2	MF
	RA	88191	2	ML
	Pin	84269	1	ML
	Pr Sh	80113	1	ML
	TC	80095	1	ML
¾ Ton (Fr. Brg. Support)	Pr Sh	80091	1	ML
1941-42				
Commercial	FW	84260	2	MF
	RA	84070	2	MLL
	TC	80095	1	ML
¾ Ton (Fr. Brg. Support)	Pr Sh	80091	1	ML
¾ and 1 Ton	Pr Sh	80030	1	ML
½ Ton	Pr Sh	80113	1	ML
4 Speed	Trans	88005	1	ML
1940				
Pass. & Sedan Delivery	FW	84006	2	MF
	FW	84013	2	Felt
	RA	80030	2	ML
	Pr Sh	80113	1	ML
	TC	80095	1	ML
	St Gr	80071	1	ML
1940				
Commercial	FW	84006	2	MF
	FW	84013	2	Felt
	RA	84070	2	MLL
	Pr Sh	80113	1	ML
	TC	80095	1	ML
1937-39				
Pass & Sedan Delivery	FW	84006	2	MF
	FW	84013	2	Felt
	RA	80030	2	ML
	Pr Sh	80240	1	ML
	TC	80095	1	ML
1939 Pass	St Gr	80071	1	ML
1937-39				
Commercial	FW	84006	2	MF
	FW	84013	2	Felt
	RA	84070	2	MLL
¾, 1 Ton (Fr. Brg. Sup.)	Pr Sh	88041	1	Cork
	TC	80095	1	ML
1933-36				
Pass. Master	FW	84006	2	MF
	FW	84013	2	Felt
	RA	84070	2	MLL
1935-36	TC	80061	1	Cork
1933-36				
Pass. Standard	FW	80029	2	MF
	RA	80030	2	ML
1935-36	TC	80061	1	Cork
1932				
Pass. & Comm.	FW	84006	2	MF
	FW	84013	2	Felt
	RI	84121	2	ML
Early	RO	92056	2	MF
Late	RO	92070	2	MF
1930-31				
Pass. & Comm.	FW	84006	2	MF
	FW	84013	2	Felt
	RI	84007	2	MC
	RO	92056	2	MF
	RO	80026	2	Felt
1925-29				
4 & 6 Cyl. Pass. & Comm.	FW	84006	2	MF
	FW	84013	2	Felt
	RI	84007	2	MC
	RO	92061	2	MF
	RO	80026	2	Felt
1918-25				
4 Cyl. 490, Superior	FW	84006	2	MF
	FW	84013	2	Felt
Superior	RI	84115	2	Felt

CHRYSLER

1947-48				
6 Cyl. C38 7 Pass	FW	84153	2	ML
1947 Early (without spring)	RI	80272	2	ML
1947 Late; 1948 (with spring)	RI	84052	2	ML
1947 Early (without spring)	RO	80272	2	ML
1947 Late; 1948 (with spring)	RO	84052	2	ML
	Pin	84147	1	MLF
(center brg)	Pr Sh	84407	2	MLL
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
(rear)	Cr Sh	95058	1	MR
1948				
6 Cyl. C38 Except 7 Pass	FW	84172	2	ML
Early (without spring)	RI	84384	2	ML
Late (with spring)	RI	84420	2	ML
Early (2.441 OD)	RO	80140	2	ML
Late (2.691 OD)	RO	84420	2	ML
	Pin	84173	1	MLF
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
(rear)	Cr Sh	95058	1	MR
1947-48				
8 Cyl C39	FW	84153	2	ML
1947 Early (without spring)	RI	80272	2	ML
1947 Late; 1948 (with spring)	RI	84052	2	ML
1947 Early (without spring)	RO	80272	2	ML
1947 Late; 1948 (with spring)	RO	84052	2	ML
Except 7 Pass	Pin	84173	1	MLF

CHRYSLER (Continued)

7 Pass only (center brg.)	Pr Sh	84407	2	MLL
1947-48	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
1947-48				
8 Cyl. C40	FW	84152	2	ML
	RI	84298	2	ML
	RO	92055	2	ML
	Pin	84288	1	MLF
(center brg)	Pr Sh	84407	2	MLL
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
1947				
6 Cyl C38 Except 7 Pass	FW	84172	2	ML
Before 70028814 (2.441 OD)	RI	80031	2	ML
Before (optional-spring loaded)	RI	80080	2	ML
After 70028814 (2.691 OD)	RI	84384	2	ML
After (optional-spring loaded)	RI	84420	2	ML
	RO	80140	2	ML
	Pin	84173	1	MLF
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
(rear)	Cr Sh	95058	1	MR
1946				
6 Cyl. C38 Except 7 Pass	FW	84172	2	ML
	RI	80031	2	ML
(optional-spring loaded)	RI	80080	2	ML
	RO	80140	2	ML
	Pin	84173	1	MLF
	Trans	80303	1	MLF
	TC	84064	1	MRF
	St Gr	80226	1	ML
(rear)	Cr Sh	95058	1	MR
1946				
6 Cyl. C38 7 Pass	FW	84153	2	ML
	RI	80272	2	ML
(Optional-spring loaded)	RI	80193	2	ML
	RO	80272	2	ML
	Pin	84147	1	MLF
(center brg)	Pr Sh	84407	2	MLL
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
(rear)	Cr Sh	95058	1	MR
1946				
8 Cyl. C39 All	FW	84153	2	ML
	RI	80272	2	ML
(optional-spring loaded)	RI	80193	2	ML
	RO	80272	2	ML
	Pin	84147	1	MLF
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
1940-42				
6 Cyl. Royal C25, C28S, C34S, Windsor C28W, C34W (except 7 Pass.)	FW	84172	2	ML
	RI	80031	2	ML
(Optional-spring loaded)	RI	80080	2	ML
	RO	88011	2	ML
(Keyway Aux.)	RO	84380	2	MR
	Pin	84173	1	MLF
	Trans	80303	1	MLF
	Ovdr	80303	1	MLF
	TC	84174	1	ML
1940 C25	St Gr	80071	1	ML
1941 C28S, C28W	St Gr	80226	1	ML
C25 After 50202	Cr Sh	95058	2	MR
C28, C34	Cr Sh	95058	2	MR
1940-42				
6 Cyl. 7 Pass. Royal C25, C28S, Windsor C28W, C34W	FW	85153	2	ML
	RI	80096	2	ML
(Optional-spring loaded)	RI	80193	2	ML
	RO	88011	2	ML
(Keyway Aux.)	RO	84380	2	MR
	Pin	84147	1	MLF
(Center Brg)	Pr Sh	84407	2	MLL
	Trans	80303	1	MLF
	Ovdr	80303	1	MLF
	TC	84174	1	ML
	St Gr	80226	1	ML
C25 After 50202	Cr Sh	95058	2	MR
C28, C34	Cr Sh	95058	2	MR

DE SOTO

1948				
6 Cyl. S11 Except 7 Pass	FW	84172	2	ML
Early (without spring)	RI	84384	2	ML
Late (with spring)	RI	84420	2	ML
Early (2.441 OD)	RO	80140	2	ML
Late (2.691 OD)	RO	84420	2	ML
	Pin	84173	1	MLF
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
(Rear)	Cr Sh	95058	1	MR
1947-48				
6 Cyl. S11 7 Pass	FW	84153	2	ML
1947 Early....(w/o spring)	RI	80272	2	ML
1947 Late; 1948 (w/spring)	RI	80193	2	ML
1947 Early...(w/o spring)	RO	80272	2	ML
1947 Late; 1948..(w/spring)	RO	80193	2	ML
	Pin	84147	1	MLF
(Center Brg.)	Pr Sh	84407	2	MLL
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
(Rear)	Cr Sh	95058	1	MR
1947				
6 Cyl. S11 Except 7 Pass	FW	84172	2	ML
Before 70028814 (2.441 OD)	RI	80031	2	ML
Before 70028814 (Optional-Spring Loaded)	RI	80080	2	ML
After 70028814 (2.691 OD)	RI	84384	2	ML
After 70028814 (Optional-Spring Loaded)	RI	84420	2	ML
	RO	80140	2	ML

DE SOTO (Continued)

	Pin	84173	1	MLF
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
(Rear)	Cr Sh	95058	1	MR
1946				
6 Cyl. S11 Except 7 Pass	FW	84172	2	ML
	RI	80031	2	ML
(Optional-Spring Loaded)	RI	80080	2	ML
	RO	80140	2	ML
	Pin	84173	1	MLF
	Trans	80303	1	MLF
	TC	84064	1	MRF
	St Gr	80226	1	ML
(Rear)	Cr Sh	95058	1	MR
1946				
6 Cyl. S11 7 Pass	FW	84153	2	ML
	RI	80272	2	ML
(Optional-Spring Loaded)	RI	80193	2	ML
	RO	80272	2	ML
	Pin	84147	1	MLF
(Center Brg.)	Pr Sh	84407	2	MLL
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
(Rear)	Cr Sh	95058	1	MR

DODGE PASSENGER

1948				
6 Cyl. D24 Except 7 Pass	FW	84172	2	ML
Early (without spring)	RI	84384	2	ML
Late (with spring)	RI	84420	2	ML
Early.....(2.441 OD)	RO	80140	2	ML
Late.....(2.691 OD)	RO	84420	2	ML
	Pin	84173	1	MLF
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
1947-48				
6 Cyl. D24 7 Pass	FW	84153	2	ML
1947 Early; (w/o spring)	RI	80272	2	ML
1947 Late; 1948 (w/spring)	RI	80193	2	ML
1947 Early; (w/o spring)	RO	80272	2	ML
1947 Late; 1948 (w/spring)	RO	80193	2	ML
	Pin	84147	1	MLF
(Center Brg.)	Pr Sh	84407	2	MLL
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
1947				
6 Cyl. D24 Except 7 Pass	FW	84172	2	ML
Before 70028814 (2.441 OD)	RI	80031	2	ML
Before 70028814 (Optional-Spring Loaded)	RI	80080	2	ML
After 70028814 (2.691 OD)	RI	84384	2	ML
After 70028814 (Optional-Spring Loaded)	RI	84420	2	ML
	RO	80140	2	ML
	Pin	84173	1	MLF
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
1946				
6 Cyl. D24 Except 7 Pass	FW	84172	2	ML
	RI	80031	2	ML
(Optional-Spring Loaded)	RI	80080	2	ML
	RO	80140	2	ML
	Pin	84173	1	MLF
	Trans	80303	1	MLF
	TC	84064	1	MRF
	St Gr	80226	1	ML
1946				
6 Cyl. D24 7 Pass.	FW	84153	2	ML
	RI	80272	2	ML
(Optional-Spring Loaded)	RI	80193	2	ML
	RO	80272	2	ML
	Pin	84147	1	MLF
(Center Brg.)	Pr Sh	84407	2	MLL
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
1937-42				
Except 7 Pass. D5, D8, D11, D14, D17, D19, D22	FW	84172	2	ML
	RI	80031	2	ML
(Optional-Spring Loaded)	RI	80080	2	ML
	RO	88011	2	ML
(Keyway Aux.)	RO	84380	2	MR
	Pin	84173	1	MLF
	TC	84174	1	ML
D5, D8, D11	St Gr	80071	1	ML
D14, D17, D19, D22	St. Gr	80226	1	ML
D5, D8, D11	Trans	84000	1	MLF
D14, D17, D19, D22	Trans	80303	1	MLF
D22 After 30348401	Cr Sh	95058	2	MR
1937-42				
7 Pass. D5, D8, D11, D14, D17, D19, D22	FW	84153	2	ML
	RI	80096	2	ML
(Optional-Spring Loaded)	RI	80193	2	ML
	RO	88011	2	ML
(Keyway Aux.)	RO	84380	2	MR
	Pin	84147	1	MLF
	TC	84174	1	ML
D5, D8, D11	St Gr	80071	1	ML
D14, D17, D19, D22	St Gr	80226	1	ML
D5, D8, D11	Trans	84000	1	MLF
D14, D17, D19, D22	Trans	80303	1	MLF
D22 After 30348401	Cr Sh	95058	2	MR
1936				
D2, D3	FW	84150	2	ML
	RI	80031	2	MF
	RO	88011	2	ML
(Keyway Aux.)	RO	84380	2	MR
	Trans	84000	1	MLF
	TC	84174	1	ML
	St Gr	80071	1	ML
Except 7 Pass.	Pin	84012	2	MLF
7 Pass.	Pin	84147	1	MLF

McCORD OIL and GREASE SEALS
SPECIFICATIONS

FORD PASS. & COMM.

Year Models	Location	McCord No.	Per Car	Mat'l
1949				
Pass	FW	84396	2	ML
	RW	80105	2	ML
	Pin	84397	1	ML
	Trans	80286	1	MLF
	Ov Dr	80286	1	MLF
	St Gr	80289	1	MR
(Shifter Fork)	Trans	80285	1	ML
1949				
Station Wagon	FW	84396	2	ML
	RW	80298	2	ML
	Pin	84149	1	ML
	Trans	80286	1	MLF
	Ov Dr	80286	1	MLF
	St Gr	80289	1	MR
(Shifter Fork)	Trans	80285	1	ML
1949				
Mercury	FW	84026	2	MF
	RW	80298	2	ML
	Pin	84149	1	ML
	Trans	80089	1	ML
	Ov Dr	80286	1	MLF
	St Gr	80288	1	MR
(Shifter Fork)	Trans	80285	1	ML
1948-49				
C½ Ton Comm.	FW	84199	2	ML
	RW	80298	2	ML
	Pin	84149	1	ML
3 Speed (Main Gear)	Trans	80089	1	ML
3 Speed (Mainshaft)	Trans	80286	1	MLF
4 Speed (Mainshaft)	Trans	84277	1	ML
	St Gr	80289	1	MR
1948-49				
D, Y, ¾ Ton Comm.	FW	84199	2	ML
Y	RW	88091	2	ML
D	RW	84250	2	ML
	Pin	80102	1	ML
	Trans	84277	1	ML
(Center Brg., front)	Cplg	84299	1	MF
(Coupling, front)	Shaft	84277	1	ML
	St Gr	80289	1	ML
1940-48 Pass and Mercury				
1940-47 Commercial				
	FW	84154	2	ML
	RI	80012	2	ML
	RO	84222	2	ML
	Dr Sh	80012	1	ML
	St Gr	80071	1	ML
(Pass. & Merc.)	Trans	80089	1	ML
1940-41				
Comm	Trans	80089	1	ML
1942-47				
Comm	Trans	80286	1	MLF
1938-39				
Pass., Comm. & Mercury	FW	84154	2	ML
	RI	80012	2	ML
1938 With 1 Piece Hub	RO	84027	2	ML
1938-39 With 2 Piece Hub	RO	84222	2	ML
	Dr Sh	80012	1	ML
	St Gr	80071	1	ML
Except 82A, 922A	Trans	80089	1	ML
82A, 922A	Trans	80077	1	ML
1928-37				
Pass. A, B, V8				
1935-38 only	FW	84154	2	ML
	RI	80012	2	ML
	RO	84027	2	ML
	Pin	80012	1	ML
	St Gr	80071	1	ML
1937 V8-60	Trans	80077	1	ML
1937 V8-85	Trans	80089	1	ML

NASH

1946-48				
600	RW	80034	2	ML
	Pin	80278	1	ML
	TC	80004	1	Felt
1946-48				
Ambassador	RI	80058	2	ML
	RO	92045	2	ML
	Pin	84248	1	ML
	TC	80004	1	Felt
1940-42				
6 Cyl. 4140, 4240	RW	80034	2	ML
	St Gr	80071	1	ML
	TC	80004	1	Felt
1941				
6 Cyl. 4160; 8 Cyl. 4180	RI	80058	2	ML
	RO	92045	2	ML
	Pin	84248	1	ML
	St Gr	80071	1	ML
7 Pass	St Gr	80226	1	ML
1940				
6 Cyl. Lafayette 4010; Nash 4020	RI	80058	2	ML
	RO	92045	2	ML
Spiral Gears	Pin	84126	1	ML
Hypoid Gears	Pin	84248	1	ML
(Rear)	Trans	84126	1	ML
(Rear)	Ovdr	80086	1	ML
	St Gr	80226	1	ML
1940				
8 Cyl. 4080	RI	84045	2	ML
	RO	92046	2	ML
Spiral Gears	Pin	84126	1	ML
Hypoid Gears	Pin	84248	1	ML
(Rear)	Trans	84126	1	ML
(Rear)	Ovdr	80086	1	ML
1938-39				
6 Cyl. 3810, 3910, Lafayette 3820, 3920	RI	80058	2	ML
	RO	92038	2	ML
(Rear)	Trans	84126	1	ML
(Rear)	Ovdr	80086	1	ML

NASH (Continued)

Year Models	Locations	McCord No.	Per Car	Mat'l
1938-39 With Spiral Bevel Axle	Pin	84126	1	ML
1939 With Hypoid Axle	Pin	84296	1	ML
1938-39				
8 Cyl. 3880, 3980	RI	84045	2	ML
	RO	92038	2	ML
(Rear)	Trans	80086	1	ML
(Rear)	Ovdr	80086	1	ML
1938-39 With Spiral Bevel Axle	Pin	84126	1	ML
1939 With Hypoid Axle	Pin	84296	1	ML
	St Gr	80226	1	ML
1937				
6 Cyl. Lafayette 3710	RI	80058	2	ML
	RO	92038	2	ML
	Pin	84126	1	ML
(Rear)	Trans	84126	1	ML
Early	Ovdr	80086	1	ML
(Cross Shaft)	Steer	80071	1	ML
1937				
6 Cyl. 3720	RI	80058	2	ML
	RO	92038	2	ML
	Pin	84126	1	ML
After 2109 (Rear)	Ovdr	80086	1	ML
(Cross Shaft)	Steer	80071	1	ML
1937				
8 Cyl. 3780	RI	84085	2	ML
	RO	92038	2	ML
	Pin	84102	1	ML
(Rear)	Trans	80086	1	ML
(Rear)	Ovdr	80086	1	ML
	St Gr	80226	1	ML
1936				
6 Cyl. Lafayette 3610	RI	80058	2	ML
	RO	92038	2	ML
	Pin	84126	1	ML
(Rear)	Trans	84126	1	ML

OLDSMOBILE

1940-49				
6 and 8 Cyl.	FW	88006	2	MF
	RI	84242	2	MLL
With ND Brg	Pin	84241	1	ML
With Hyatt Brg	Pin	84381	1	ML
(Main)	Trans	80116	1	MLF
(Selector Shaft)	Trans	80106	1	ML
(Exc. 8 Cyl., 1949)	TC	84050	1	Felt
	St Gr	80071	1	ML
1939				
6 and 8 Cyl.	FW	88006	2	MF
	Rear	84242	2	ML
	Pin	84241	1	ML
(Main)	Trans	80116	1	MLF
(Selector Shaft)	Trans	90106	1	ML
	TC	84050	1	Felt
(Cross Shaft)	Steer	80071	1	ML
1937-38				
6 and 8 Cyl.	FW	84207	2	MF
	Rear	84171	2	ML
	Pin	84183	1	MF
	TC	84050	1	Felt
(Cross Shaft)	Steer	80071	1	ML
1936				
6 and 8 Cyl.	FW	88109	2	MF
	FW	84264	2	Felt
	Rear	84106	2	MF
	Pin	80074	1	Felt
	TC	84050	1	Felt
1935				
6 and 8 Cyl.	FW	88109	2	MF
	FW	84264	2	Felt
	Rear	84106	2	MF
	Pin	80070	1	Felt

PLYMOUTH

1948				
6 Cyl. P15	FW	84172	2	ML
Early (Without Spring)	RI	84384	2	ML
Late (With Spring)	RI	84420	2	ML
Early (2.441 OD)	RO	80140	2	ML
Late (2.691 OD)	RO	84420	2	ML
	Pin	84173	1	MLF
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
1947				
6 Cyl. P15	FW	84172	2	ML
Before 70028814 (2.441 OD)	RI	80031	2	ML
Before 70028814 (Optional Spring Loaded)	RI	80080	2	ML
After 70028814 (2.691 OD)	RI	84384	2	ML
After 70028814 (Optional Spring Loaded)	RI	84420	2	ML
	RO	80140	2	ML
	Pin	84173	1	MLF
	Trans	80303	1	MLF
	St Gr	80226	1	ML
	TC	84064	1	MRF
1946				
6 Cyl. P15	FW	84172	2	ML
	RI	80031	2	ML
(Optional Spring Loaded)	RI	80080	2	ML
	RO	80140	2	ML
	Pin	84173	1	MLF
	Trans	80303	1	MLF
	TC	84064	1	MRF
	St Gr	80226	1	ML
1937-42 Except 7 Pass.	FW	84172	2	ML
	RI	80031	2	ML
(Optional Spring Loaded)	RI	80080	2	ML
	RO	88011	2	ML

PLYMOUTH (Continued)

Year Models	Location	McCord No.	Per Car	Mat'l
(Keyway Aux.)	RO	84380	2	MR
	Pin	84173	1	MLF
	TC	84174	1	ML
1937-41	St Gr	80071	1	ML
1942	St Gr	80226	1	ML
1937-39	Trans	84000	1	MLF
1940-42	Trans	80303	1	MLF
	Cr Sh	95058	2	MR
1936				
P1, P2	FW	84150	2	ML
	RI	80031	2	ML
(Optional Spring Loaded)	RI	80080	2	ML
	RO	88011	2	ML
(Keyway Aux)	RO	84380	2	MR
	Trans	84000	1	MLF
	Ovdr	84000	1	MLF
	St Gr	80071	1	ML
	TC	84174	1	ML
Except 7 Pass	Pin	84012	1	MLF
7 Pass	Pin	84147	1	MLF

PONTIAC

1948-49				
6 and 8 Cyl.	FW	84260	2	MF
	RW	84242	2	MLL
	Pin	84381	1	ML
Syncromesh (Rear)	Trans	80154	1	MLF
Syncromesh (Selector Shaft)	Trans	80106	1	ML
Hydramatic (Rear)	Trans	80116	1	MLF
	TC	84151	1	MC
	TC	80150	1	Cork
	St Gr	80071	1	ML
1941-47				
Station Wagon	FW	84260	2	MF
	RW	84242	2	MLL
(Selector)	Trans	80106	1	ML
(Rear Brg.)	Trans	80154	1	MLF
	Pin	84241	1	ML
(Pitman)	St Gr	80071	1	ML
	TC	84151	1	MC
	TC	80150	1	Cork
1940-47				
6 and 8 Cyl.	FW	84260	2	MF
	RW	84242	2	MLL
With ND Brg.	Pin	84241	1	ML
With Hyatt Brg.	Pin	84381	1	ML
(Selector Shaft)	Trans	80106	1	ML
	St Gr	80071	1	ML
(Rear Brg.)	Trans	80154	1	ML
	TC	84151	1	MC
	TC	80150	1	Cork
1939				
6 and 8 Cyl.	FW	84182	2	MF
	Rear	84242	2	ML
	Pin	84241	1	ML
1939 6 and 8 Cyl. (Cont'd.)				
(Rear Brg.)	Trans	80154	1	MLF
(Selector Shaft)	Trans	80106	1	ML
	TC	84151	1	ML
	TC	80150	1	Cork
1937-38				
6 and 8 Cyl.	FW	84182	2	MF
	Rear	84171	2	ML
	Pin	84183	1	MF
(Front)	Pr Sh	80101	1	ML
	TC	84151	1	ML
	TC	80150	1	Cork
1933-36				
6 and 8 Cyl.	FW	84006	2	MF
	FW	84013	2	Felt
	Rear	84070	2	MLL
	TC	84151	1	MC
	TC	80150	1	Cork
1932				
8 Cyl.	FW	88061	2	MF
	FW	84049	2	Felt
	RI	80020	2	MF
With Stamped Spring Seats	RI	84046	2	MF
	RO	84047	2	MF
	Pin	80008	1	Felt
	TC	84151	1	MC
	TC	80150	1	Cork
1929-32				
6 Cyl.	FW	84006	2	MF
	FW	84013	2	Felt
	RI	80020	2	MF
With Stamped Spring Seats	RI	84046	2	MF
	RO	84047	2	MF
	Pin	80008	1	Felt

IMPORTANT

Lack of space prevented us from listing Specification for, "Trucks and Tractors" However, we carry a complete stock, covering all models, and we will be only too glad to help you with your problems. Drop us a line, stating, MAKE, YEAR and MODEL of your Truck or Tractor, and we will do the rest. We are also in a position to supply you with a Manufacturer's Catalogue covering all types of McCord Oil Seals. If you are interested in one of these, please do not hesitate to write for your copy.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

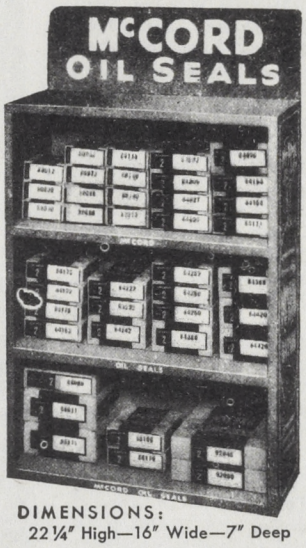
McCORD OIL and GREASE SEALS

No. 8585 BRAKE SERVICE OIL SEAL ASSORTMENT

80 POPULAR SEALS

LIST PRICE $56.54

INCLUDES CABINET



DIMENSIONS:
22¼" High—16" Wide—7" Deep

A popular assortment of fast moving front and rear oil seals including 1949 models.

The steel cabinet contains 80 McCord oil and grease seals and in addition has room to add other popular numbers.

When you pull a wheel install a new McCord seal.

IT'S THE OIL SEAL YOU FAIL TO REPLACE THAT COSTS MONEY

CONTENTS

Quantity	McCord No.	Car Model and Year
2	80012	Ford, 1928-48; Mercury, 1939-48; Lincoln Zephyr, 1936-48
4	80030	Chevrolet 6, 1933-49
2	80058	Nash 6, 1935-48
2	80073	Hudson 6-8, 1936-49; Studebaker 6, Champion, 1939-46
4	80080	Chrysler, DeSoto, Dodge, Plymouth, 1937-early 47
2	80118	Studebaker 6, Champion, 1939-48
4	80140	Chrysler, DeSoto, Dodge, Plymouth, 1946-early 48
2	80313	Studebaker 6, Champion, 1939-48
2	84002	Hudson 6-8, 1933-49
2	84006	Chevrolet 4-6, 1925-40
4	84027	Ford, 1928-38; Lincoln Zephyr 12, 1936-38
2	84070	Chevrolet 6, Commercial, 1933-48
4	84154	Ford, 1928-48; Mercury 1939-48; Lincoln Zephyr, 1936-48
2	84171	Pontiac 6-8, 1937-38
4	84172	Chrysler, DeSoto, Dodge, Plymouth, 1937-48
2	84178	Buick 8, 40-50-60-70, 1940-49
2	84182	Pontiac 6-8, 1937-39
4	84222	Ford 1938-48; Mercury 1939-48; Lincoln Zephyr, 1939-48
2	84242	Oldsmobile 6-8, 1939-49; Pontiac 6-8, 1939-49
2	84252	Packard 6, 1940-49; 8, 1942-49
4	84260	Chevrolet 6, 1941-49; Pontiac 6-8, 1940-49
4	84380	Chrysler, DeSoto, Dodge, Plymouth, 1936-42 (auxiliary seal)
4	84420	Chrysler, DeSoto, Dodge, Plymouth, Late 1947-48
2	88006	Oldsmobile 6-8, 1939-49
4	88011	Chrysler, DeSoto, Dodge, Plymouth, 1936-42
2	88109	Buick 8, 40-60, 1934-40; 50-70, 1940
2	88110	Buick 8, 40-50-60-70, 1941-49
2	92045	Nash 6, 1940-48
2	92060	Packard 6, 1940--49; 8, 1942-49

No. 8584 FRONT WHEEL OIL SEAL ASSORTMENT

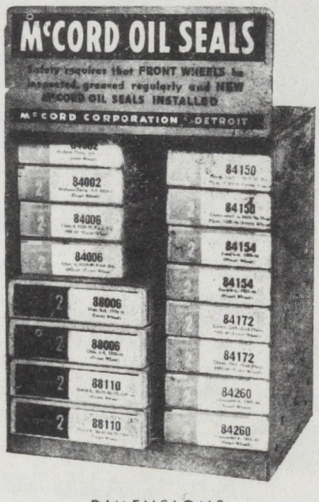
The 32 seals in this assortment are the most popular, most often used in the McCord line. Every garage and service station needs this assortment. It will show a good profit to the purchaser.

CONTENTS

Quantity	McCord No.	Seals For	Year
4	84002	Hudson-Terraplane 6-8	1933-49
4	84006	Chevrolet 6 Pontiac 6-8	1929-40 1933-36
4	88006	Oldsmobile 6-8	1939-49
4	88110	Buick 8, 40-50-60-70	1941-49
4	84150	Chrysler-DeSoto 6 Dodge-Plymouth 6	1935-36 1933-36
4	84154	Ford 6-8	1933-48
4	84172	Chrysler-DeSoto-Dodge-Plymouth 6	1937-48
4	84260	Chevrolet 6 Pontiac 6-8	1941-49 1940-49

32 POPULAR SEALS LIST PRICE $22.09
McCORD NO. 8584

INCLUDES CABINET



DIMENSIONS:
10½" High — 8½" Wide — 6" Deep

PRICE LIST

McCord No.	List Each	McCord No.	List Each	McCord No.	List Each	McCord No.	List Each	McCord No.	List Each	McCord No.	List Each	McCord No.	List Each
80004	.25	80080	1.46	80226	.75	84026	.83	84150	.86	84260	.59	88005	1.87
80008	.25	80086	1.24	80240	.63	84029	3.13	84151	1.50	84264	.26	88006	.75
80012	.83	80089	.97	80272	.92	84045	.75	84153	.92	84269	1.87	88011	1.46
80020	.63	80091	1.12	80278	1.62	84046	.83	84154	.67	84277	1.87	88041	.25
80026	.21	80095	.90	80285	.75	84047	.97	84157	.53	84288	2.99	88061	.45
80029	.37	80096	1.00	80286	2.02	84050	.30	84171	1.42	84296	2.20	88091	1.95
80030	1.05	80101	1.20	80288	.78	84052	1.46	84172	.86	84298	1.16	88109	.75
80031	.92	80102	1.20	80289	.75	84064	1.86	84173	2.38	84299	.97	88191	1.65
80034	.75	80105	1.50	80298	1.12	84070	1.65	84174	1.32	84380	.97	92038	1.49
80058	1.24	80106	.53	80303	2.08	84102	1.34	84182	.53	84381	1.28	92045	1.49
80061	.18	80113	.83	84000	2.24	84106	.45	84183	.90	84384	1.00	92046	1.34
80070	.37	80116	1.42	84006	.59	84115	.22	84199	1.05	84396	1.12	92055	1.69
80071	.75	80140	.92	84007	.53	84121	1.34	84207	.75	84397	1.72	92056	1.42
80074	.25	80150	.22	84012	2.16	84126	1.79	84222	1.34	84407	2.46	92061	.76
80077	1.50	80154	1.28	84013	.22	84147	2.40	84241	1.05	84420	1.46	92070	1.42
		80193	1.46					84242	1.42			95058	.92

KENDALL, *The* 2000 MILE OIL

RECOMMENDED FOR ALL PASSENGER CAR AND HEAVY DUTY GASOLINE ENGINE SERVICE

KENDALL, the 2000 MILE OIL



KENDALL, the 2000 Mile Oil, is refined by special methods—including two advanced processes used by no other Pennsylvania refiner. These special processes insure easy starting on cold winter mornings because every grade of Kendall, the 2000 Mile Oil, is dewaxed to flow at zero. These processes also remove non-lubricating elements that cause sludge and high temperature lacquer—frequent sources of trouble in modern high speed engines. Kendall is refined from 100% Bradford, Pennsylvania oil—the choicest crude in the world. Millions of motorists have proven that Kendall may be safely driven 2000 miles between oil changes, if the proper oil level is maintained. Kendall quality is safeguarded by refinery sealed cans, each can numbered and registered for the user's protection.

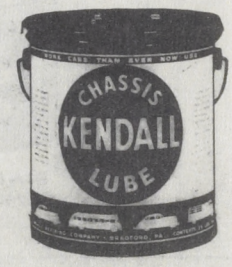
Available in
1 lb. Cans
5 lb. Cans
25 lb. Pails
25 lb. Bung Pail
100 lb. Drums
400 lb. Drums

KENDALL CHASSIS LUBE



Available in
S.A.E. Grades 10-70
1 and 5 Qt. Cans

A general purpose chassis and tractor track-roller lubricant especially suited to pressure gun application. A soft, transparent, viscous grease capable of withstanding unusually high pressures—will not readily wash or squeeze out. Literally seals chassis parts against entrance of dirt and moisture. Recommended for high pressure points, such as shackles, steering connections and universal joint splines on all cars and light duty trucks, also for aircraft engine rocker arms. Due to its thoroughly refined, heavy mineral oil content—a viscous, dewaxed 100% Pennsylvania aircraft oil—will lubricate more cars or trucks per drum.



KENDALL HEAVY DUTY CHASSIS LUBE

A water resistant, viscous chassis lubricant compounded from an extremely heavy Pennsylvania mineral oil for heavy duty service. Recommended for truck, bus, or tractor chassis parts such as spring shackles, steering connections, pedal shafts, crawler type tractor rollers, etc.



KENDALL NO. 7 PRESSURE GUN GREASE



Kendall No. 7 Pressure Gun Grease is a water resistant grease made from selected Bradford, Pennsylvania oils. It is especially adapted to applications where greasing equipment is exposed to low temperatures. Recommended for lubrication of chassis parts on all types of automotive equipment, especially where a "medium duty" type of chassis lubricant is satisfactory.



KENDALL WHEEL BEARING GREASE



A tenacious, high melting point, heavy duty type wheel bearing grease. The oil base—refined from 100% Bradford, Pennsylvania crude—provides a combination of great resistance to heat and relative freedom from channeling at low temperatures, so that the same grade is used the year around. Has a tough, tenacious, fibrous nature to resist centrifugal force at high speeds. Recommended for all wheel bearings and other parts requiring "short or medium" fibre grease.



KENDALL CUP GREASES are available in No. 2 (soft), No. 3 (medium), and No. 4 (hard) consistencies. They are compounded with highly refined oils from 100% Bradford, Pennsylvania Crude, into smooth, water resistant greases.



No. 2 Cup is recommended for light duty, high speed ball bearings, electric motors, and general purpose lubrication where a soft, smooth grease is required. No. 3 Cup is recommended for general automotive and machine shop use in such parts as automobile engine distributor shafts, machine shop line shafting, medium duty electric motors and other equipment requiring a medium cup grease. No. 4 Cup is recommended for slow speed line shafting, truck and bus propeller shaft center bearings and industrial uses where a hard cup grease is required.

Kendall No. 1 Cup Grease, for ball or roller bearings operating at low temperature, is also available on special order.

Available in 1 lb. Cans; 5 lb. Cans; 25 lb. Pails; 100 lb. Drums; 400 lb. Drums

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

KENDALL LUBRICANTS

Kendall's All Purpose, All Weather Gear Lubricant

S.A.E. 80 - S.A.E. 90 - S.A.E. 140 — Combined In One Lubricant!



For those who wish to use the exact grades and types of lubricants recommended by all car manufacturers, Kendall offers the complete line of Kendall Gear Lubricants shown above. For those who wish to use only one gear lubricant, Kendall offers the only combined S.A.E. 80, 90 and 140, All-Purpose, All-Weather gear lubricant—KENDALL THREE STAR GEAR LUBE. Its resistance to change of fluidity with temperature is due to special refining processes, peculiar to Kendall in the Pennsylvania field, and to the use of Bradford, Pennsylvania Crude—the World's Costliest.

KENDALL E.P. GEAR LUBE is a high quality gear lubricant especially developed for dependable lubrication of transmissions and spiral bevel rear axles in passenger cars, trucks and buses WHERE AN EXTREME PRESSURE LUBRICANT IS SPECIFIED. It is a compound of low pour test, highly refined 100% Bradford, Pennsylvania mineral oil and selected extreme pressure bases to secure the highest possible resistance to decomposition and scoring. It combines excellent cold weather features—easy gear shifting and freedom from channeling—with full protection against wear and scoring at the most severe operating conditions of load and temperature. Kendall E.P. Gear Lube is sold in three grades—S.A.E. 80, S.A.E. 90 and S.A.E. 140

KENDALL E.P. GEAR LUBE, GRADE S.A.E. 90 ONLY, is also a "Truck Duty Hypoid Lubricant" approved by truck manufacturers for bus or truck hypoid axle lubrication.

KENDALL S.A.E. 80 E.P. GEAR LUBE is recommended for Winter use where "E.P." Gear Lubricant is specified.



KENDALL HYPOID LUBE is a "Passenger Car Duty Hypoid Lubricant" developed, after careful research, to meet the exacting requirements of hypoid gears in modern cars. It is a compound of low pour test, 100% Bradford, Pennsylvania mineral oil with the powerful extreme pressure ingredients recommended by most car and gear manufacturers for passenger car hypoid gear lubricants. The use of Bradford, Pennsylvania mineral oil in Kendall Hypoid Lube means freedom from sluggish action and channeling in winter. Approved by leading car and gear manufacturers for all *Passenger Car* hypoid gears, Kendall Hypoid Lube will protect gears against wear and scoring under the most severe driving conditions.

KENDALL 45% GRAPHITE GREASE is a compound of highest quality flaked graphite mixed with a selected, waterproof, semi-fluid grease to a smooth, even consistency for ease of service in all types of grease guns. It is especially compounded to meet the exacting specifications of leading car and spring cover manufacturers for the lubrication of leaf springs equipped with covers. Also recommended for brake cables, speedometer cables, and other parts requiring a grease of this graphite content.

KENDALL WATER PUMP GREASE is a firm, amber colored, water resistant lubricant compounded with oils especially refined from Bradford, Pennsylvania Crude oil. It is especially resistant to the thinning action of heat, and is not easily forced into the cooling system. It assures protection against wear and leakage of cooling water past the pump shaft. Kendall Water Pump Grease is recommended for water pump lubrication where a "Water Pump Grease" is specified by the manufacturers, and for marine stuffing boxes, on propeller shafts, etc.

KENDALL UNIVERSAL JOINT GREASE has the approval of leading universal joint manufacturers for use in enclosed type universal joints where "long fibre" universal joint grease is specified. Skillful compounding of quality mineral oil refined 100% from Bradford, Pennsylvania Crude, into a tough, fibrous, heat resistant grease results in an outstanding universal joint lubricant—a lubricant that provides the economy of low wear and dependable operation.



KENDALL STAINLESS GREASE STICK—DOOR EASE prevents squeaks, rust, and wear and eliminates sticking. It lubricates moving surfaces such as rubber, metal, wood, glass or felt without soiling or deteriorating the material. It withstands heat without melting or cold without crystallizing. It is handy, clean and fool-proof. You use it like a crayon on moving surfaces. Sticks are shop size, packed 6 to a carton.



PRICE LIST

KENDALL THE 2000 MILE OIL		**CUP GREASE No.'s 2, 3, 4**	
Quart Cans	2.20 per Gal.	1 lb. Container	.50 per lb.
25 Gallon Drums	2.10 per Gal.	5 lb. Container	.44 per lb.
45 Gallon Drums	2.10 per Gal.		
		WATER PUMP GREASE	
KENDALL ALL OIL GEAR LUBE (All Grades)		1 lb. Container	.55 per lb.
100 Pound Drums only	.27 per Lb.	5 lb. Container	.45 per lb.
KENDALL 80-90-140 ALL WEATHER PURPOSE GEAR LUBE		**45% GRAPHITE GREASE**	
100 Pound Drums only	.36 per Lb.	5 lb. Container	.45 per lb.
KENDALL CHASSIS LUBE		**WHEEL BEARING GREASE**	
400 Pound Drums	.30 per Lb.	1 lb. Container	.54 per lb.
100 Pound Drums	.32 per Lb.	5 lb. Container	.48 per lb.
25 Pound Drums	.33 per Lb.	25 lb. Container	.48 per lb.
HYPOID & E.P. GEAR LUBE		**KENDALL DOOR EZE**	
1 lb. Container	.39 per lb.		.65 Tube.
100 lb. Container	.30 per lb.		

D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

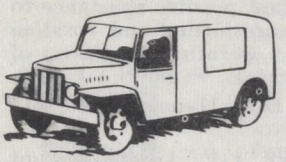
PUROLATOR



Micronic FILTER

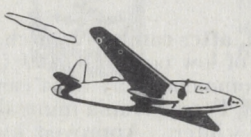
1 NEW, FINER FILTER MATERIAL

The Purolator MICRONIC Filter is radically new. It is made of a plastic impregnated cellulose which gives it great strength—it will not warp, distort, or disintegrate as it is totally unaffected by crankcase temperatures or dilution. The MICRONIC Filter is capable of keeping the oil free of unbelievably small particles which, measured in microns, are .000039 of an inch in size.



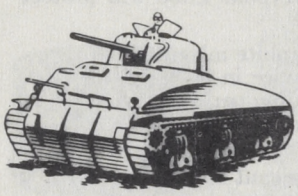
2 SPECIAL "ACCORDION" DESIGN

Although no larger than ordinary filters, the new MICRONIC filter has 570 sq. in. of effective filtering surface as compared to 69 sq. in. in other makes. This means more than 200% longer life and is achieved by the use of the accordion design. The accordion pleats in the element stretch out to more than 10 feet in length. Visualize the dirt capacity of this tremendous filtering area!



3 OIL PASSES THROUGH THE MICRONIC ELEMENT

Purolator MICRONIC element gives you swift, positive filtration as the dirty oil passes thru the filtering medium. The patented design permits complete control of the degree of filtration. Where layers or stacks of untreated paper are used, distortion of the filtering unit is a potential menace and usually results in seepage of dirty oil between the layers.



4 CAN BE USED WITH ANY MOTOR OIL

The Purolator MICRONIC Element can be used with any motor oil. It will not affect the good, lubricating qualities of your oil. It will keep the oil free of all harmful abrasives but will not change its lubricating qualities. Some elements do affect the heavy duty or "detergent" oils by removing some of the additives. To retain the good lubricating qualities built into your oil, specify Purolator.



5 AS MUCH AS 70% MORE MILES BETWEEN MOTOR JOBS.

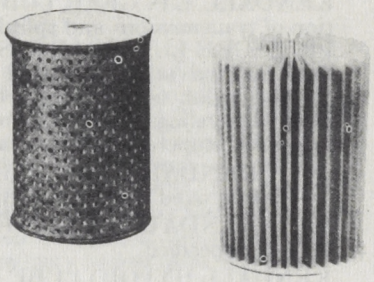
Car manufacturers have proven that oil filters reduce engine wear by 50 to 70% and have selected Purolator MICRONIC Filters as original equipment to give this increased engine life. This prompt acceptance of the Purolator MICRONIC Filter by Automotive Engineers is positive proof of foremost efficiency.



IN WAR- More Purolators for more purposes were used by the Armed Forces than any other make!

IN PEACE- More engines use Purolator as original equipment than all other makes combined!

REPLACEMENT ELEMENTS



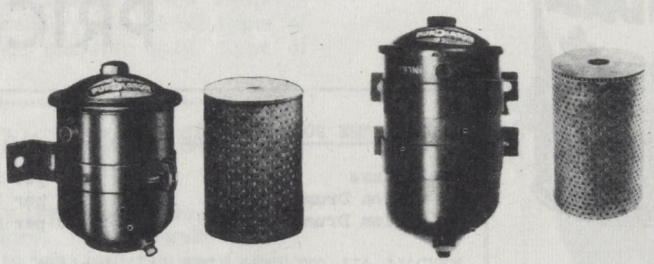
This is a picture of a new Purolator P-70 "Micronic" Element, used in the P-700 Series Filter.

Note the V spaces between the convolutions or folds of the filtering medium. It is these spaces that give the P-70 Element so much more filtering area than is provided by other types of Elements. You see—The oil must pass *through the plastic* from outside to inside of the element on its way back to the engine, thus abrasives, sludge, and other harmful particles are trapped in the V spaces, until the spaces are filled.

It is perhaps difficult to appreciate that a filter element will remove so much substance from an engine. ***But*** the "Micronic" element actually does, because it removes particles as small as a micron.

It removes *more* dirt, because the V spaces provide more filtering capacity and the extensive plastic medium provides more filtering area. They are also stronger.

COMPLETE FILTERS



P-704 P-70 P-901 P-90

HOW TO SELECT THE CORRECT FILTER SIZE

To select the proper Micronic filter for all types of internal combustion engines, be guided by crankcase capacity. Install no filter smaller than the P-901 for truck engines

Puralator Number	CRANKCASE CAPACITY Gasoline Engines	Diesel Engines
P-704	6 Qts. or less	
P-901	7 to 15 Qts.	10 Qts. or less
PR-2900	15 to 30 Qts.	11 to 20 Qts.
PR-3000	30 Qts. and up.	21 to 32 Qts.

Fittings and flexible lines are required to install the Micronic Purolators.

All Micronic Puralators have the type number stamped into the cover rim. All are identical in quality, function and principle of oil filtration. Case and covers are made of heavy gauge steel and embody life-time construction features. Drain plugs are provided on all sizes to permit draining and cleaning at cartridge change. Cartridges are easily and quickly removed and replaced.

OUT-PERFORMS, OUTSELLS ALL OTHER BRANDS

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

PUROLATOR INSTALLATION RECOMMENDATIONS

Complete kits for cars not standard equipped at Factory

MAKE	YEAR	MODEL	USE KIT NUMBER
Austin	1948-50	All "8" models with sealed type	640
Buick	1936-50	All models not equipped	635
Chevrolet	1937-50	All models	696
Cadillac	1949-50	Any model	677
Dodge	1949-50	D-31 111" wheel base	655
Ford—Monarch		Any model	697-07
Mercury, Meteor		Any model	697-07
Hudson	Up to 1947	6 cyl. model	633
Hudson	1948-50	8 cyl. model	633
Hudson	1948-50	6 cyl. model	662
Nash	1937-50	All "600" models	650
Nash		Ambassador	601
Packard	1940-50	Any model	649
Plymouth	1949-50	P-17 111" wheel base	655
Pontiac & Olds.	1942-50	All models	608-76
Studebaker	1939-50	Champion	632
Willys		Any model	665

Standard Equipped Passenger Cars

MAKE	YEAR	MODEL	PUROLATOR REPLACEMENT NUMBER
Buick	1939-42	Optional Equipment—all models	P-37
	1948	Optional Equipment—all models	P-51
	1949-50	50 70 Series (40 Series Optional)	P-125
Cadillac	1939-42	V16-90	P-37
Chrysler	1936-46	All models	PR½ or PN-15
	1947-50	All models	P-82
DeSoto	1937-46	All models	PR½ or PN-15
	1947-50	All models	PR½ or P-70
Dodge	1934-46	All models	PR½ or PN-15
	1947-50	All models (Except Model D-31)*	PR½ or P-70
Ford	1947-50	All models	P-34-43
Frazer	1946-50	All models	P-70
Graham	1938-41	All models	P-34-43
Kaiser	1946-50	All models	P-70
Hudson	1946-50	Optional Equipment—all models	T-9
Lincoln	1938-49	All models	P-34-43
Monarch	1946-50	All models	P-34-43
Mercury	1946-50	All models	P-34-43
Meteor	1948-50	All models	P-34-43
Oldsmobile	1948	All models	P-51
	1949-50	Rocket 88, 98, V-8	P-124
	1949	Optional Equipment 76	P-51
Nash	1940-49	Ambassador	PR½
Packard	1937-39	120, 120B, 120C	PR½
	1940-41	1800, 1900, 160, 180	PN-15
	1942-48	2000 to 2008, 160, 180	P-54
	1946-48	Taxi	P-90
	1947-50	Super 8	P-70
Plymouth	1934-42	All models	PR½ or PN-15
	1947-50	All models (Except Model P-17)*	PR½ or P-70
Studebaker	1938-50	Commander and President	P-34-43
Willys	1941-50	Jeep—Military	P-51
	1946-48	Jeep—Civilian	P-34-43
	1948-50	Jeep and Jeepster	P-33 or P-70

GET IT FROM YOUR JOBBER

TRADE MARK

Standard Equipped Trucks

MAKE	YEAR	MODEL	USE KIT NO.
Chevrolet	1937-50	All models not equipped	696*
G.M.C.	1937-50	All models with Chevrolet engine	696*
I.H.C.		K-1, 2, 3, 4, 5 and KB-1, 2, 3, 4, 5	660*
All other makes		Up to 1 ton	600*
		1 ton and over	6900**

** NOTE—Use Purolator P-90 when replacing element.

*Note—Use Purolator P-70 when replacing element.

Complete kits for trucks not standard equipped at Factory

MAKE	YEAR	MODEL	FIELD INSTALLATION	PUROLATOR ELEMENT
Chevrolet	All	Not factory equipped	Kit 696*	See Note *
Dodge	1936-42	½ to 1½ ton		PR½ or PN-15
	1936-42	2 to 3 ton		PN-15
	1946-50	½ to 1½ ton		PR½ or P-70
	1946-50	2 to 3 ton		P-70
Fargo	1936-42	½ to 1½ ton		PR½ or PN-15
	1936-42	2 to 3 ton		PN-15
	1942-50	½ to 1½ ton		PR½ or P-70
	1946-50	2 to 3 tons		P-70
Dodge and Fargo may be equipped with Heavy Duty Filter—if so, use				P-90
Ford	1937-41	All		P-44
	1941-42	All		P-34-43
	1946-50	All		P-50
G.M.C.	1937-41	Canadian built valve in head	Kit 696*	See Note *
	1942-50			P-36
	1940-43	Canadian Army		P-50
	1939-50	U.S. built, 400 series		P-37
	1939-50	U.S. built, 500, 600, 700 series		P-38
I.H.C.	All	Canadian built, L head, ½ to 2 ton		T-1
	All	Canadian built, valve in head, 2 ton up		T-2
	All	U.S. built, K8, 9, 10, 11, 12		T-8
Mercury	1948-50	All		P-50
Studebaker	1940-50	All		P-34-43

Standard Equipped Tractors

MAKE	YEAR	MODEL	PUROLATOR REPLACEMENT
Allis Chalmers	1939-49	B, C, WC, M, B-15, W-25, U40, WF	T-7
	1939-49	HD7, HD-10	M-106
Caterpillar	1940-49	All	T-10
	1940-50	All (Fuel)	M-116
	1940-50	All (Lube)	T-10
Cockshutt		Model 30	M-103
	1939-46	Combines	M-105
	1947-49	Combines	M-101
	1949-50	Model 40	M-115
Case	1940-42		PN-16
	1947-49	V, VA, VAI, VAO, VAC	T-7L
	1947-49	DE, DI, SB, SI	M-101
	1947-49	LAI	M-109
Clectrac		DG	T-8
		ED, EDM	T-2
		HG-68, UD-42	T-17
Ferguson	1948-50	TE-20, TO-20	M-120
Ford		All (and Ford-Ferguson)	M-102
Gibson	1949-50	H	M-111
	1949-50	I	M-103
Goodison-Oliver	1940-47	80	M-118
John Deere		AH, 1081R, AH1082R, AH783R, AH784R	T-6
		AA2092R, AA2093R, AA3585R, AA3680R	T-12
		Combine	M-101

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PUROLATOR INSTALLATION RECOMMENDATIONS

FARM TRACTOR ELEMENTS . . . continued

MAKE	MODEL	PUROLATOR REPLACEMENT
I.H.C.	T, TD, ID, W, WD, U, UD, I, ID, M before serial FBKM 59394 W-16, 16, 06, before serial BKM 4253 U-6, IU-6, before serial UBKM 2327	T-20
	F-14, I-14, O-14, W-14, P-12, I-30, U-10, F-20, T-20, U-7, 200, 10-20, F-30, A & B before serial 96389, M after FBKM 59394; W-6, 16, 06, after serial BKM 4253; U-6, IU-6, after serial UBKM 2327; H before serial FBH-121022; W-4, 04, 14 before serial FBM 4958; IU4, U4, before serial UBH-2730; NO7, 10 & 11 Thresher	T-15
	A & B after serial 97938; H after serial FBH 121022; W-4.04, 14 after serial FBM 4958; IU4, U4 after serial UBHM 2730	T-109

MAKE	YEAR	MODEL	PUROLATOR REPLACEMENT
Massey-Harris		81, 82, 101 Jr., 101 Sr., Combines 15, 17, 20	M-105
		102, 202, 203, 44, 44-6, 55	M-109
		Pony 20, 22, 30	M-101
		Pacemaker	M-108
Minn-Moline		R, RT, Z U.T.-U.-GTA-GTB	M-113 M-118
Oliver Hart Parr		60	T-7L
		70	T-17
		80, 90, 99	T-12
Oliver	1949-50	80	M-113

PUROLATOR PRICE LIST

MICRONIC TYPE FILTERS

Model		Price
PR-½	Sealed Cartridge Type	$ 3.50
PM-701	No Bracket—Inlet Spud Left	6.50
PM-704	With Bracket—Inlet Spud Center	7.25
PM-709	With Bracket—Inlet Spud Left	7.25
P-901	Heavy Duty (4 to 13 qts. capacity)	12.50

MICRONIC ELEMENTS FOR

PM-10	Commercial Full Flo AS-4; Allis Chalmers 048068	$ 1.25
PM-11	Purolator 12001-1 Metal Element	3.75
PN-15	Puro N-1500 Series Filter	1.60
PN-16	Puro N-1600 Series Filter	1.70
N-17	Puro N-1700 Series Filter	2.50
N-19	Puro N-1900 Series Filter	2.90
P-33	Fram C-3 Element, Innerline CH-10; Allis Chalmers 034914	1.60
P-34-43	Fram C-4; Kralinator K-55 Element	1.60
P-35-50	Fram C-30; Kralinator K-525, Military Sr.	2.35
P-36	A-C C-10 Element	1.95
P-37	A-C C-11 Element	1.75
P-37D	A-C Fuel Element	1.95
P-38	Fram C-102; A-C C-121 Element	3.50
P-40	Puro U.S. 400 Series Filter	1.60
P-44	Kralinator K-5 Element	1.50
P-45	A-C L-4; Allis Chalmers 064127 Element	1.60
P-46	Briggs G-2	1.70
P-47	Kralinator K-60 Element	1.75
P-48	Briggs G-2½ Element	1.75
P-49	Briggs G-3 Element	1.95
P-50	See P-35-50	2.35
P-51	All Military Junior Element	1.65
P-52	Briggs G-4 Element	2.40
P-54	Packard PD-54 Element	1.75
P-55	A-C T-501 and A-C T-50 Element	1.60
P-56	A-C T-1 Allis Chalmers 040930	2.00
P-70	Puro P-701, P-704, P-709 Filter	1.60
P-71	Puro P-703 Fuel Filter	2.00
P-80	Commercial AS-8, 1026-1129	2.15
P-82	Chrysler & Puro Full Flow Filter	2.00
P-90	Puro P-900; Packard 387888	1.95
P-91	Cleveland Diesel Fuel; Puro P-904	3.95
P-92	Puro P-900 Full Flow Filter	2.50
P-124	A-C P-122 Element	4.55
P-125	A-C P-127 Element	4.30
P-128	Kralinator K-575 Element	2.25
PM-170	Commercial Ful Flow 1293-5-10-3	2.00
P-434	Winslow 1240	3.00
PR-750	Luberfiner 750, (2) 1500, (3) 2250	10.00
T-1-P	DeLuxe JC Element	1.60
T-2-P	DeLuxe CU Element	1.70
T-3	WGB C-108 Element	1.80
T-4	WGB T-108 Element	2.00
T-5	WGB S-108 Element	2.75
T-8-P	Michiana SA-15117 Element	1.85
T-9-P	Michiana SA-15417 Element	1.75
T-11	DeLuxe SD Element	3.00
T-13	DeLuxe DF Element	4.20
T-18	WGB Jr., J-100 Element	1.50
T-21	WGB D-108 Element	4.60
T-22P	Michiana SA-5433 Element	1.75

PUROLATOR

Micronic ELEMENT

- - - HOLDS ITS SHAPE!

WILL NOT . . . WARP

ASSORTMENTS

No. 1	Mobile Cabinet	List Price Contents $75.80
F-7	Filter Assortment	42.35
GP-14	Element Assortment	22.65
P-2	Hose Line Assortment	29.70
P-4	Hose Line Assortment	14.35

COMPLETE KITS FOR CARS AND TRUCKS NOT FACTORY EQUIPPED

600	Marine—Universal	$13.00
601	Nash Ambassador	12.00
606-76	Pontiac—Oldsmobile 1942-50	11.50
632	Studebaker Champion	11.25
633	Hudson	11.50
635	Buick	12.50
640	Austin A-40	10.50
641	English Fords	10.50
649	Packard	12.00
650	Nash "600"	11.50
655	Chrysler	10.50
660	International Harvester Trucks	14.00
662	Hudson "6"—1948	11.50
665	Willys	11.50
677	Cadillac 1949-50	14.50
696	Chevrolet—Pontiac (Valve-in-head)	10.75
697-07	Ford 1937-50	11.60
6900	Heavy Duty	16.75

FITTING SETS

CP-4	Chevrolet—Pontiac (Valve-in-head)	$ 4.25
CP-5	Ford 1934-50	5.10
CP-6	Oldsmobile—Pontiac (L-head)	5.00
CP-7	Studebaker Champion	4.75
CP-8	Hudson	5.00
CP-9	Nash "600"	5.00
CP-10	Pontiac 1942-50	5.00
CP-12	International Harvester Trucks	7.50
CP-13	Nash Ambassador	5.50
CP-15	Buick	6.00
CP-17	Packard	5.50
CP-18	Willys	5.00
CP-19	Hudson "6"—1948	5.00
CNF-20	Marine—Universal	4.75
CP-23	Austin A-40	4.75
CPF-701	Plymouth—Dodge 1949	3.00

FARM TRACTOR ELEMENTS

Model	Usage	List Price
T-6	John Deere	1.20
T-7	Allis Chalmers 204912	.95
T-7L	Oliver	.95
T-10	Caterpillar (Lube)	1.90
T-12	John Deere	1.20
T-15	International Harvester	1.30
T-17	Oliver Cletrac HG-1948	1.35
T-20	International Harvester	1.60
T-109	International Harvester	1.20

MICRONIC FARM TRACTOR ELEMENTS

M-101	Massey-Harris, Cockshutt, Norseman	$ 1.40
M-102	Ford, Ustrac 10A, Fram C-3	1.40
M-103	Cockshutt, Gibson, Fram C-4	1.40
M-104	Michiana, Massey-Harris	1.60
M-105	Massey-Harris, Cockshutt	1.40
M-106	Allis-Chalmers	1.75
M-107	Massey-Harris	1.55
M-108	Massey-Harris, Michiana HW-1450, SA-8453	1.80
M-109	Massey-Harris	1.80
M-110	Military Senior	1.90
M-111	Gibson, Model H, Fram C-9	1.35
M-112	Allis Chalmers	1.45
M-113	Minneapolis-Moline, Oliver	1.45
M-114	Fram F-30 series	1.80
M-115	Cockshutt	1.40
M-116	Caterpillar Fuel	1.45
M-117	Puro N-1700 series	2.00
M-119	Puro N-1900 series	2.25

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Your Dollars Turn Faster with

C-I-L Permanent ANTI-FREEZE

New Lower Prices

mean a lower stock investment for you. You can sell for less because you pay less. You get faster turnover and speedier profits. Over 10% reduction from 1949 prices opens up more prospects, makes selling easier.

National Advertising

will keep turnover and profits going UP! Hundreds of thousands of quality-conscious car owners bought C-I-L ANTI-FREEZE in 1949. Heavy advertising again in 1950, plus new reduced prices, will help you win bigger profits from this fast-growing market.

"It's made by C-I-L"

Every one knows C-I-L, Canada's leading manufacturer of industrial chemicals. Every one knows C-I-L makes only top-quality products — Duco, Dulux, Cellophane, Nylon. "It's made by C-I-L" is the strongest assurance you can give your customers of the superb quality and performance of C-I-L ANTI-FREEZE.



C-I-L *Ethylene Glycol* ANTI-FREEZE

gives winter-long protection

C-I-L Ethylene Glycol ANTI-FREEZE and ANTI-RUST is a permanent-type anti-freeze. It won't evaporate, boil off or foam, flows freely at all temperatures, and guards the cooling system against rust and corrosion. Sell the BEST to customers who want the BEST in permanent winter protection.

★ ★ ★

50-PS-14

CANADIAN INDUSTRIES C-I-L LIMITED
Anti-Freeze
SERVING CANADIANS THROUGH CHEMISTRY

CANADIAN INDUSTRIES LIMITED • MONTREAL

AUTOMOTIVE and HOUSEHOLD CHEMICALS

CAR RADIATOR SPECIALTIES



C-I-L COOLING SYSTEM CLEANSER

dissolves rust, scale and grease. Cleans thoroughly without reverse flushing. Will not damage hose, packing or metal parts. Saves gas and improves engine performance.

1 Lb. List Price: 1.00



C-I-L COOLING SYSTEM SEALER

stops leaks quickly and securely, and keeps the cooling system leak-proof. Will not clog the radiator or harm the parts.

1/2 Pint List Price .65



C-I-L COOLING SYSTEM RUST INHIBITOR

keeps cooling system free from rust for entire season. Prevents rust forming and stops acid corrosion.

1 Pint List Price .65



MOTOR-MEND

Quickly and effectively seals cracks in cylinders, engine blocks, water jackets, radiators, valve ports, etc. on cars, trucks, busses and tractors. Makes permanent repairs in 30 minutes or less. Won't harm hose or metal parts, nor clog the cooling system. No need to disassemble the engine--simply pour contents of one can into the radiator while the engine is running. Produces a hard internal bond that is not affected by standard anti-freeze or rust inhibitor solutions. Adheres to metal and will contract and expand with changing temperatures.

1 Pint List Price 1.75



CAR APPEARANCE SPECIALTIES

C-I-L CLEANER and POLISH "TRIPLE-ACTION"



A combination liquid cleaner and polish that saves time and work by doing three jobs all at once. Cleans away dirt and traffic film, polishes and applies a protective film of wax in one operation. Quickly restores the original lustre and beauty of the finish.

	List Price
1/2 Pint	.60
1 Pint	.85
1 Gallon	4.35

C-I-L AUTOMOBILE WAX

FOR A HARD DURABLE LUSTRE



A quick-drying paste-type polishing wax. Produces a brilliant, durable lustre that repels moisture and protect the finish against weathering. Dust and dirt wipe off readily making it easy to keep the car looking bright and shiny.

7 Oz. Can List Price .75

C-I-L PRE-WAX CLEANER

FOR OLD AND BADLY WEATHERED FINISHES



Removes traffic film and chalked pigment and prepares the finish for waxing. Does not produce a high lustre, and for best results should be followed by C-I-L Automobile Wax.

12 Oz. Can List Price: .65

The use of the C-I-L Products listed on this page will convince you, that they are the finest in their line. For further information and illustrated pamphlets, please write us, and we will be only too glad to be of service to you.

NEW SPEEDY ECONOMICAL



This new, time-saving C-I-L Garage Auto Wax makes it possible to wax a whole car at once. No stopping to polish small areas before wax dries — no overlap smudges.

1 Lb. Cans List Price 1.50

CAR UPKEEP SERVICE

TARKLENE



Removes Grease and Tar from Automobiles--A safe, efficient solvent for removing tar, grease and road oil from automobiles. Will not soften discolour or dull the finish. Quick and easy to use. Just apply with a soft cloth or a soft-metal-bound bristle brush and rub spots until they disappear. Tarklene not only cleans but restores the finish to its original lustre. Sometimes used to clean very dirty cars before they are polished. Will not harm the hands.

1 Pint	List Price	.65
1 Quart	List Price	1.15

FABRIC CLEANER



A safe, speedy, non-inflammable cleaning fluid for removing spots caused by grease, oil, paint, gum and adhesive tape. Recommended for use on colour-fast garments, draperies, fabrics, seat-covers and upholstery in the home or automobile. Leaves no odour or rings and will not shrink or injure fabrics.

1/2 Pint List Price .65

SEAL-M-TITE



A black, waterproof compound for sealing cracks and stopping leaks around auto top mouldings, windshield frames, car windows, trunk joints, etc. It is free-flowing, easy to handle and has excellent adhesive qualities. Dries tack-free in about 30 minutes. Will not spot DUCO or DULUX. Produces a permanent, flexible repair. Also recommended for sealing batteries and coating battery terminals.

3 Oz. Tube List Price .50

CHROME CLEANER



Removes Rust--Cleans Metal. A new speedy cleaner and polish for bumpers, grills, hubcaps and other chromium plated automobile fittings, also recommended for use in the home and shop. Polishes nickel, brass, copper and stainless steel. Apply with a soft cloth which has been moistened and wrung "dry". Rub to remove rust and stain and polish with a clean cloth

1/2 Pint List Price .65

AUTO TOP FINISH



Finest and most durable dressing for coated auto tops, side curtains, trunk and tire covers, etc. It water proofs and preserves the fabric. Makes dull, worn and faded tops look new. Holds its lustre, does not fade or change colour and will not crack the top under extreme weather conditions. Requires only an occasional washing to maintain a beautiful appearance.

1/2 Pint List Price .65

TOUCH-UP BLACK



A black, enamel for retouching scratches and worn spots on fenders, bumpers, frames, etc. Suitable for use over black DUCO or DULUX lacquer and enamel finishes. Dries dust free in one to two hours leaving no brush marks. Gives a hard, durable, glossy finish.

LIST PRICES	
1/4 Pint	1/2 Pint
.50	.75

BLACK TIRE AND RUBBER DRESSING



A blackdressing for renewing the appearance of tires, rubber mats and running boards. Can be easily applied with a brush, sponge or cloth. Dries in 15 minutes and makes old and weathered rubber look like new.

LIST PRICES		
1/2 Pint	1 Pint	1 Gal.
.65	1.05	5.80

CAR WASH



A new soapless cleaner for washing automobiles, trucks and buses. Removes dirt film, oil and grease quickly and safely. Contains no soap animal fats or vegetable oils. Can be used on bodies, windows, metal trim and wheels. Easy on the hands and car finish. Prepare solution by adding water to a small quantity of CAR WASH with a heavy jet to make it foam. Then apply with a sponge or turkish towel, rubbing over surface to loosen dirt and hose down promptly before CAR WASH dries. No need for chamois or manual drying--it dries by itself, leaving a sparkling clean finish.

	List Price
4 Ozs.	.35
4 1/2 Lbs.	4.45

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

HOUSEHOLD and WORKSHOP SPECIALTIES

PLASTIC WOOD

HANDLES LIKE PUTTY-HARDENS INTO WOOD



Unequalled for filling cracks, scratches, nail holes, etc., in wood and repairing wooden articles. Easy to use, it moulds just like putty before hardening into wood. When dry it can be nailed, screwed, sawed, carved, planed and will sand to a fine edge. It adheres firmly, is greaseproof and waterproof and takes paint, lacquer, stain and varnish.

SOME OF ITS MANY USES

Resetting loose rungs in chairs and tables.
Fastening handles on brooms, mops, brushes and hand tools.
Plugging cracks in door and window frames.
Boat building and repairing.

LIST PRICES

1½ Oz. Tube	4 Oz. Can	1 lb. Can	10 lb. Can
.25	.45	1.15	8.65

PLASTIC WOOD SOLVENT



For use when PLASTIC WOOD has dried in the can through prolonged exposure to air. A little PLASTIC WOOD SOLVENT poured in the can and allowed to stand before using will restore the PLASTIC WOOD to proper working consistency.

LIST PRICES

1/4 Pint	1 Pint	1 Quart	1 Gal.
.45	.95	1.40	4.60

HOBBY CEMENT



C-I-L HOBBY CEMENT is made especially for the hobbyist--for youngsters and grown-ups who like to make and mend things. It is a clear, fast-drying cement with a high degree of wet strength requiring only a minimum of pressure time. Excellent for cementing models, toys, wrought leather ceramics, moulded or cut glass and other porous and non-porous materials.

1 Oz. Tube List Price .15

HOUSEHOLD CEMENT



C-I-L HOUSEHOLD CEMENT is a transparent, flexible, waterproof cement for mending broken china, glass, wood and metal articles and for repairing tears in leather, paper and fabrics--in fact it mends almost anything but rubber. It is easy to apply and dries quickly to make strong, permanent joints. C-I-L HOUSEHOLD CEMENT has hundreds of uses in the home, office and shop as it puts damaged articles back into use quickly and easily.

1 3/4 Oz. Tube List Price .25

PAPER CEMENT



A transparent, water-white, fast-drying cement for bonding paper to paper without wrinkling or staining. Strong, flexible and waterproof. Easy to apply amd any excess can be readily removed by rubbing with the fingertips after drying. Does not discolour stamps photographs, etc., cements permanently but retains tackiness for a few minutes allowing the paper to be lifted and rearranged, if necessary. Does not discolour with age and will not mar or soften furniture finishes.

LIST PRICE (With Applicator)

1/4 Pint	1/2 Pint	1 Pint
.45	.75	1.25

WORKSHOP CEMENT



A transparent, heavy bodied, easy-working cement with good wet strength for general workshop use in the home, office or shop. Excellent for bonding all porous and non-porous surfaces. Requires no mixing or heating Exceptionally strong and water resistant. Superior to animal glues and casein cements. Retains its tough film characteristics with age under changing conditions of heat, humidity and cold and does not become brittle.

LIST PRICES

1/4 Pint	1/2 Pint	1 Pint
.85	1.35	2.40

WORKSHOP CEMENT SOLVENT

A solvent to be used when WORKSHOP CEMENT becomes too heavy for easy application.

1/4 Pint List Price .45

PRO-TEK



Here's the answer to everyone's problem--how to keep hands clean when doing dirty or messy jobs. PRO-TEK is a greaseless, odourless cream which protects the hands against paint, lacquer, grease, grime, oil, solvent, gasoline, etc. When PRO-TEK is rubbed on hands you can't see it or feel it--it becomes invisible and is not sticky. It washes off easily with soap and water when the job is done taking the dirt and stains with it.

LIST PRICES

8 Oz. Jar	1 Qt.	1 Gal.
.50	1.40	4.80

GENERAL SERVICE

GASKET CEMENT



Provides a permanent pressure-proof seal which cements various types of gaskets but which expands and contracts with changing temperatures.

2 Oz. Bottle List Price .25

GASKET COMPOUND (Non-Hardening)



This preparation is recommended for making temporary or removable assemblies because it remains pliable and never hardens. It is marketed in a tube for easy application.

3 Oz. Tube List Price .50

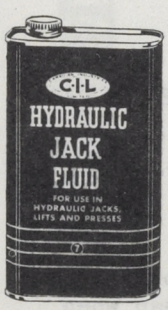
GASKET COMPOUND (Aviation Liquid)



May be used on machined surfaces, ground joints, threaded or rubber hose connections, battery terminals, etc. It aids in disassembly without damage as it never dries out or gets too hard, and has the added advantage of being resistant to alcohol, glycol, gasoline, motor oil and water.

1 Pint List Price 1.95

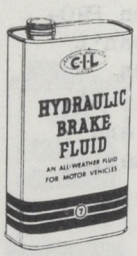
HYDRAULIC JACK FLUID



A light-bodied replacement oil for hydraulic jacks, lifts, presses and hoists. It is resistant to deterioration at high temperatures and ensures positive operation under all weather conditions. A non-evaporating, non-corrosive lubricant which is harmless to metal parts.

1 Quart	List Price	.75
1 Gallon	List Price	2.70

HYDRAULIC BRAKE FLUID



A fluid for all types of hydraulic brakes. Will mix readily with all fluids approved and used by car and truck manufacturers. Prevents deterioration of working parts. Is non-corrosive and acts as a lubricant.

1 Pt.	1 Qt.	1 Gal	5 Gal.
1.30	2.30	8.00	38.00

RUBBER LUBRICANT



Ideal for lubricating and eliminating squeaks from all rubber parts on cars such as rubber shackles, bushings engine mountings, shock arms, steering columns, spring pads, grommets, insulation strips etc. Also used on springs and other metal-to-metal contacts where squeaks are likely to occur. Keeps rubber soft and pliable and retards deterioration. Has extraordinary penetrating properties and is easy to apply.

1/2 Pint List Price .95

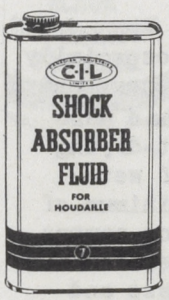
MECHANICS PENETRATING OIL



A special blend of chemicals with outstanding penetrating power. Saves time and labour by quickly loosening stubborn nuts, bolts, stubs, engine heads, pipe joints, etc., which have become frozen due to formation of rust, corrosion, carbon and gum deposits. Contains no harmful acid or alkali. Acts as a lubricant as well as a penetrant.

1 Quart	List Price	1.10
1 Gallon	List Price	3.40

SHOCK ABSORBER FLUID



An approved fluid that complies with specifications laid down by the manufacturers of all types of rotary shock absorbers. Non-evaporating, will not gum or corrode rubber or metal parts and maintains the correct degree of viscosity to provide efficient operation in all weather. Protects parts from deterioration by lubricating action.

	List Price
Shock Absorber Fluid (Houdaille) 1 Qt.	2.70
Shock Absorber Fluid Knee Action) 1 Qt.	1.25

SMALL PARTS CLEANER



Is a specially prepared mixture of chemicals and solvents for cleaning metal engine parts. It quickly and thoroughly removes deposits of grease, dirt, oil and gasoline residues after only a few minutes of immersion in the cleaner. Five Gallon pails of this product are equipped with a dipping basket which permits small parts to be cleaned quickly and easily.

	List Price
1 Gallon	4.55
4 Gallon (with Basket)	22.80
4 Gallon (without Basket)	17.40

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

5 HANDY SIZES AT NEW LOW PRICES

Everybody will want a



superior to natural sponges in every way

C-I-L Sponges are tough and durable . . . outlast natural sponges.

Free from grit, sand and organic impurities.

Square shape permits sponge to get into corners.

When squeezed dry, may be used as a chamois.

Flat surfaces cover more area, saving time and effort.

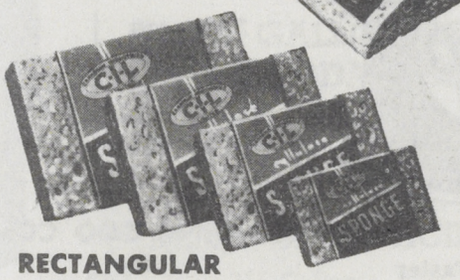
These remarkable sponges float . . . do not pick up dirt from bottom of cleaning pail.

Pick up and hold 20 times their weight in water . . . amazingly absorbent.

Can be easily sterilized by boiling.

TURTLEBACK





RECTANGULAR

C-I-L Sponges are priced to give you fast turnover and a generous profit margin. For years, cellulose sponges had to be imported. They were in short supply and hard to get, but now they are plentiful—and at new low prices—for they are being made in Canada by Canadian Industries Limited.

SIZE	DIMENSIONS	NO. IN INTERMEDIATE CARTONS	SUGGESTED UNIT RETAIL PRICE
4	4½ x 3 x 1	20	.25
6	5⅛ x 3⅔ x 1⅓	20	.45
8	6 x 4 x 2	10	.85
9	7½ x 4¾ x 2¼	—	1.15
10	7¼ x 4½ x 2¼	10	1.25



D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

AUTO CHEMICALS

BARDAHL



"Reduces friction 75%"



"A Super Lubricant Grease"

BAR-DOL BASE OIL

		List Price
16 Oz Cans	2 doz. to case	1.25
1 Imp. Gal.	2 to case	9.65
5 Imp. Gal.	Drum	43.50
25 Imp. Gal.	Drum	7.50 per Gal.
45 Imp. Gal.	Drum	7.35 per Gal.

BAR-DOL GREASE

LIGHT CUP-MEDIUM FIBRE-HEAVY FIBRE

	List Price
1 lb. Tins. 12 to case	.90
5 lb. Tins. 12 to case	4.25
25 lb. Pail	18.75
50 lb. Pail	35.00

BAR-DOL TOP LUBE

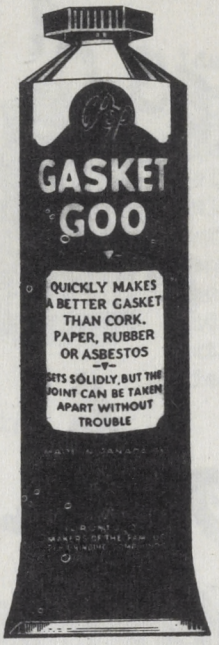
Top Lube (Gasoline Engine)	List Price
4 Oz. Tin 2 doz. to case	.35
1 Imp. Gal. 2 to case	9.65

SIMONIZ





SIMONIZ	Std. 7 oz.	.80
	Pound	1.50
SIMONIZ KLEENER (paste)	St. 12 oz.	.80
	½ gallon	3.50
	Gallon	6.40



PEP GASKET GOO COMPOUND

STANDARD PASTE TYPE

	List
3 oz. net tube	.55
11 oz. net tube	1.40
6 lb. can	8.75

BRUSH TYPE, LIQUID

5 oz. can	.85
18 oz. can	2.20
5 lb. can	7.45

PEP GRINDING COMPOUND —WATER-MIXED

Proven to be Better For Leak-Proofing And Time Saving



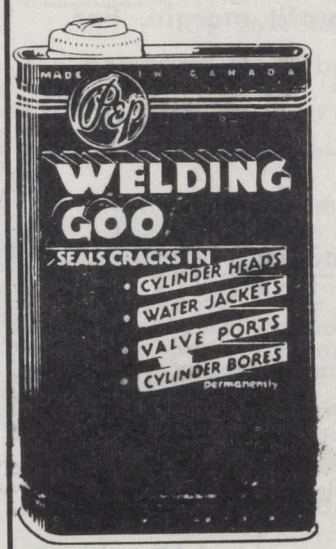
16 oz. can available in "Fine", "Medium", "Coarse" Other sizes in "Medium" only, which is best for Auto Valves.

2 oz. can	.45
4 oz. can	.65
8 oz. can	1.10
16 oz. can	1.80
5 lb. can	6.95

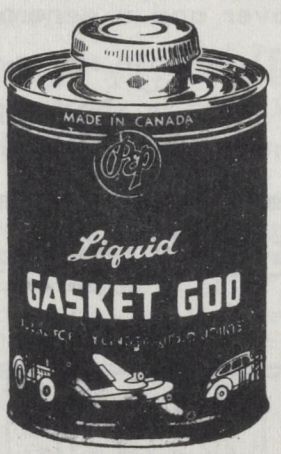
PEP WELDING GOO COMPOUND

For Faster Smoother Gas-Tight Jobs

1 Imperial Pt.	1.95



Another Can Free If It Fails



Joining and Sealing Compound Use on Every Cylinder Head Gasket

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

Pyrene FIRE EXTINGUISHER PRODUCTS

VAPORIZING LIQUID TYPE EXTINGUISHERS



"PYRENE" Hand Pump Type



Stock No.		Description	List Price Each
C11	1	Pint Brass, Wall Bracket	$ 16.40
C14	1	Pint Chrome, Wall Bracket	18.15
C14A	1	Pint Chrome, Auto Bracket	19.40
C21	1	Quart Brass, Wall Bracket	20.50
C24	1	Quart Chrome, Wall Bracket	22.50
C21T	1	Quart Heavy Vehicle Brass, Clamp Bracket	21.15
C24T	1	Quart Heavy Vehicle Chrome, Clamp Bracket	23.40
C31	1½	Quart Brass, Clamp Bracket	24.80
C34	1½	Quart Chrome, Clamp Bracket	27.65

Prices are for extinguishers complete with charge and bracket. Extinguishers ordered without bracket — subtract net price of bracket from net price complete to determine net price without bracket.

"PYRENE" Heavy Duty Stored Pressure Type

C53	1	Quart Coppertone, Clamp Bracket	45.40
C103	2	Quart Coppertone with Hanger	76.80
C43	1	Gallon Coppertone with Hanger	115.00

Combination Nozzle (Shut-off, solid stream or spray) is standard on all 1 and 2 Quart Sizes; when supplied with 1 Gallon Extinguishers add $3.00 to net price.

"PYRENE" VAPORIZING LIQUID TYPE REFILLS

CR2	1	Quart Can	2.50
CR4	1	Gallon Can	8.25





5 GALLON PUMP TANKS

"PYRENE" (Formerly "ACCURATE")

T15	Galvanized Steel, Red Enamel	33.70
T13	Polished Copper	52.15

2½ GALLON SODA-ACID TYPE EXTINGUISHERS

"PYRENE" SODA-ACID (Formerly "GUARDENE") Standard

S13	2½	Gallon, Polished Copper	31.80
S14	2½	Gallon, Chrome Plated	37.75

SODA-ACID TYPE RECHARGES

"PYRENE" SODA-ACID (Formerly "GUARDENE")

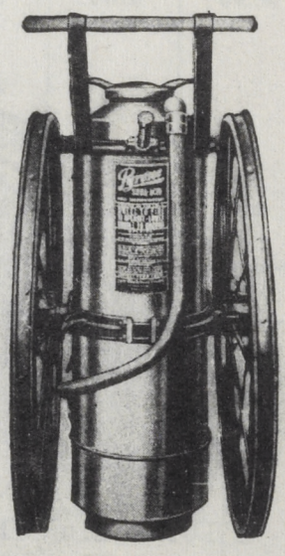
SR1	2½	Gallon	1.10
SR2	20	Gallon	5.00
SR3	40	Gallon	7.50

FOAM TYPE EXTINGUISHERS

"PYRENE" FOAM (Formerly "PHOMENE") Standard



Stock No.		Description	
P13	2½	Gallon, Polished Copper	$ 40.15
P14	2½	Gallon, Chrome Plated	46.45



FOAM TYPE RECHARGES

"PYRENE" FOAM (Formerly "PHOMENE")

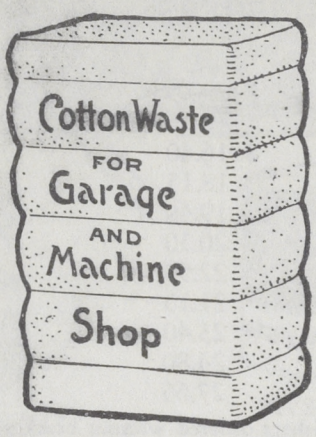
PR1	2½	Gallon	3.10
PR3	10	Gallon	8.50
PR6	40	Gallon	18.45

FOAM TYPE ENGINES ON WHEELS

"PYRENE" FOAM (Formerly "PHOMENE")

PD1PN	10	Gallon, Indoor Engine	200.00
PD2PN	40	Gallon, Indoor Engine	685.70
PD3PN	40	Gallon, Outdoor Engine	735.70
PD4PN	40	Gallon, Airport Engine	785.70

AUTOMOTIVE WIPERS AND RAGS

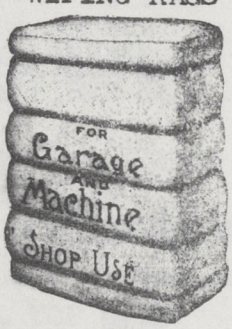


Our line of waste is efficient. Soft absorbency makes a high saturation point; more work per handful.

10 and 25 lb. Bales
Net Price: .35 Per lb.

50 and 100 lb. Bales
Net Price: .32 Per lb.

WIPING RAGS

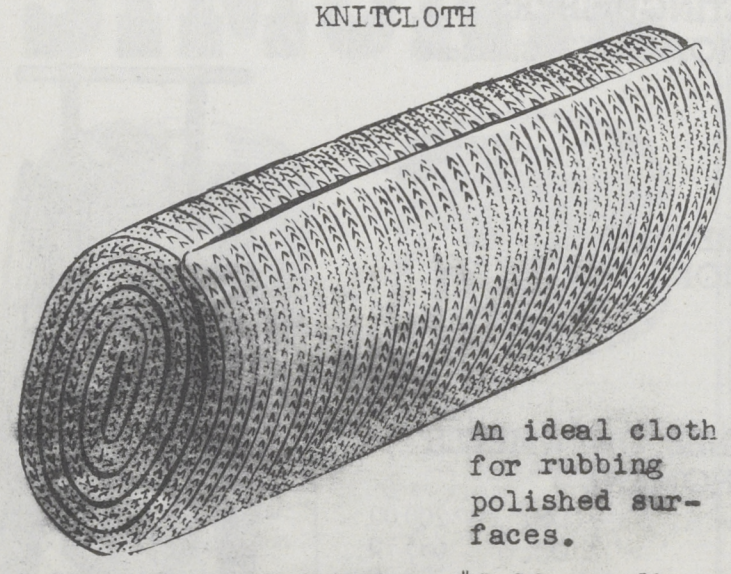


Laundered and sterilized. Guaranteed to be sanitary.

Selected White Wipers, in 10, 25 and 50 lb. Bales. Net Price: .41 per lb.

#1 Light Coloured, in 10, 25 and 50 lb. Bales Net Price: .35 per lb.

KNITCLOTH



An ideal cloth for rubbing polished surfaces.

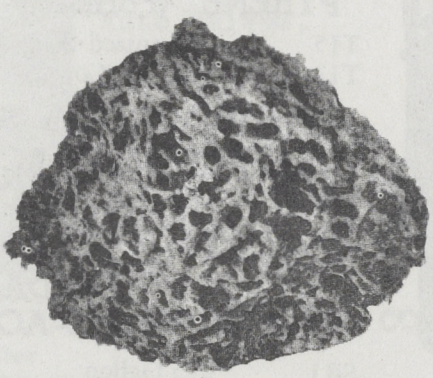
1 Lb. Rolls Net Price: $1.18 per lb.
5 lb. Rolls Net Price: $1.17 per lb.



This Chamois is of the finest quality, absorbs water quickly and wrings out dry. Ideal for washing and polishing automobiles, windows etc.

		Net Price
17" x 18"	Master	1.65
20" x 21"	Master	2.30
22" x 23"	Master	2.75
23" x 24"	Master	3.00
24" x 25"	Master	3.25

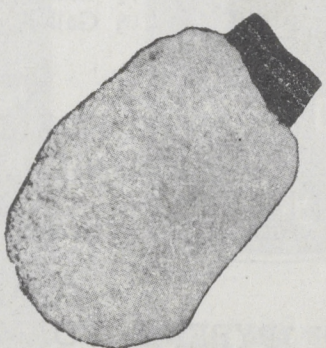
SPONGES



These sponges are of very fine quality good shape and size.

	Net Price
Wool pre-war Cuban Sponge, 9/12	2.25
Grass Select 6/8 Size	2.25

LAMB'S WOOL WASH MITTS



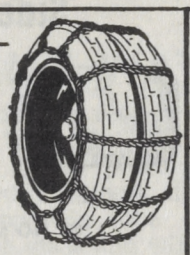
The Ideal Washing and Polishing Mitt. Can be washed clean, and used over and over again.

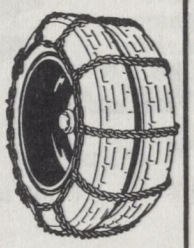
Net Price: $1.50

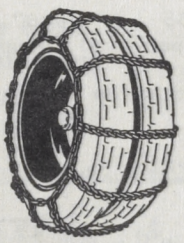
"CLAW" TIRE CHAINS

PASSENGER CAR TIRE CHAINS

Tire Size	HEAVY Stock Number	HEAVY Retail Price Per Pair
4.50/4.75-16, 4.50/4.75-17		
4.50/4.75/5.00-19	1106	12.15
4.50/4.75/5.00-20, 4.40/4.50/4.75-21		
5.00-14 5.00-15, 5.25/5.50-15		
6.40-15	1110	12.15
6.40-16, 5.00/5.25/5.50-16		
5.25/5.50-17	1120	12.15
5.25/5.50-18, 5.25/5.50-19, 6.00/6.50/6.70-15, 6.00-16		
6.00/6.50/6.70-15, 6.00-16	1134	12.90
6.50/6.70-16, 6.00/6.50-17	1138	14.00
710/7.60-15	1150	14.00
7.00/8.20-15, 7.00-16	1152	15.65
7.60-16	1153	14.60
7.00-17	1168	16.75
7.50-14 7.50-15	1179	15.65
7.50-16 7.50-17	1180	16.75
8.90-15	1182	16.75







"CLAW TIRE CHAINS"

have the following exclusive features:

1.—Extra-biting WEDGE of steel on every cross-link that is kept sharp by the honing action of the road.

2.—Indented Rim Chain keeps cross chain hook in perfect alignment, saves wear on rim Chain.

3.—Fastener, the easiest of them all.

4.—Extra quality, electrically-welded Chain throughout.

5.—The extra metal means additional wear, and longer life because of wedge shape.

"CLAW" TRUCK TIRE CHAINS

Tire Size	SINGLE Stock Number	SINGLE Retail Price Per Pair	DUAL Stock Number	DUAL Retail Price Per Pair
32 x 6.50-20, 32 x 6, 8 ply 5" rim	2008	$19.25	3008	$31.15
7.00-15, 7.00-16, 7.50-15	2011	22.35	3011	29.55
7.00-17-18, 7.50-16-17	2014	23.00	3014	29.55
34 x 7.00-20, 32 x 6, 10 ply 6" rim, 32 x 7.50-18	2018	24.20	3018	31.15
34 x 7, 34 x 7.50-20	2020	25.70	3020	34.00
36 x 8.25-20	2032	28.60	3032	38.55
8.25-24	2035	29.00	3035	40.30
38 x 9.00-20, 10.00-18	2046	30.25	3046	40.65
38 x 9.75-20, 40 x 9.00-22, 10.00-20	2048	32.35	3048	46.80
42 x 9.00-24, 40 x 9.75-22, 10.00-22	2054	32.85	3054	48.65
42 x 9.75-24, 10.00-24	2060	34.85	3060	51.90
40 x 10.50-20, 11.00-20	2066	37.80	3066	55.35
40 x 10.50-22, 11.00-22, 10.50-24, 11.00-24	2068	39.20	3068	59.85
12.00-20	2086	42.00		
12.00-24	2088	48.00		
12.75-20, 13.00-20	2090	45.00		
12.75-24, 13.00-24	2092	48.00		
13.50-20, 14.00-20	2094	48.00		
13.50-24, 14.00-24	2096	51.70		

PASSENGER CAR "HEAVY" CROSS CHAINS

TIRE SIZE	STOCK #	LIST Per 100
4.40-4.50-4.75	6106	26.00
5.00-5.25-5.50-6.40	6110	31.00
6.00-6.50-6.70	6134	40.00
7.00-7.10-7.60	6152	40.00
7.50-8.20-8.90	6179	48.50

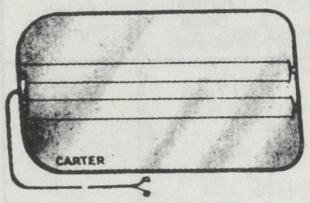
"CLAW" TRUCK CROSS CHAINS

SINGLE TIRE SIZE	SINGLE STOCK #	SINGLE LIST Per 100	DUAL TIRE SIZE	DUAL STOCK #	DUAL LIST Per 100
5, 5.50, 6.00	7001	52.50	5, 5.50, 6.00	7101	80.50
6, 6.50	7002	58.50	6, 6.50	7102	100.50
7, 7.00, 7.50	7003	80.50	7, 7.00, 7.50	7103	117.00
8, 8.25	7004	84.00	8, 8.25	7104	132.50
9, 9.00, 9.75, 10.00	7005	92.00	9, 9.00, 9.75, 10.00	7105	139.00
10, 10.50, 11.00	7006	108.00	10, 10.50, 11.00	7106	165.00
12, 12.75, 13.00	7007	124.00			
13.50, 14.00	7008	137.00			

WINTER SUPPLIES

Sleet Shields

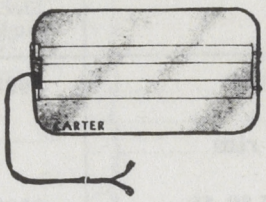
FOR WINDSHIELDS



12" x 22"

No. 916 Electric—6 volts. For left windshield only

Price ..... **$4.50 each**



10" x 18"

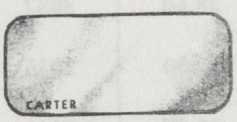
No. 106 Electric—6 volts.
Price ..... **$3.60 each**

No. 112 Electric—12 volts.
Price ..... **$3.80 each**

Switch and connection cord come with each unit. "Carter" Sleet Shields provide greater vision area for current consumed. Will fit almost any car.

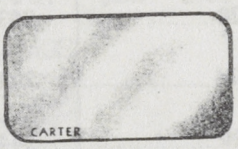
Frost Shields

FOR WINDSHIELDS



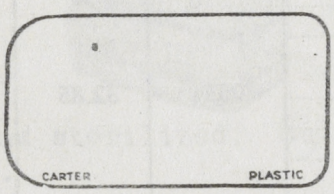
8" x 18"

No. 3 ..... **$2.80 pair**



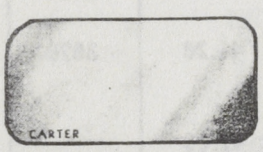
10" x 18"

No. 10 ..... **$3.20 pair**



13" x 24½"

No. 1324—Heavy plastic for rounded windshields.
Price ..... **$4.90 pair**



10" x 20"

No. 9 ..... **$3.50 pair**



12" x 22"

***No. 91** ..... **$4.20 pair**

***NOTE** — **No. 91R** Shields for right side of windshield may be purchased separately for use with 916 electric.
Packed 10 only per case ..... **$2.10 each**

Side Windows



8" x 12"

No. 7 ..... **$2.40 pair**



6" x 14"

No. 4 ..... **$2.40 pair**



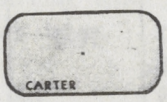
8" Dia.

No. 88 ..... **$1.70 pair**



4" x 13"

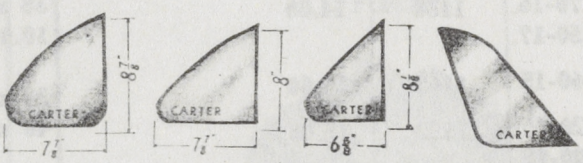
No. 13 ..... **$1.80 pair**



7" x 12" Plastic

No. 712 ..... **$2.40 pair**

Side Vent Windows



No. 65 ..... **$1.70 pair**

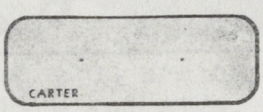
No. 67 ..... **$1.70 pair**

No. 69 ..... **$1.70 pair**

No. 68 For Studebaker ..... **$2.30 pair**

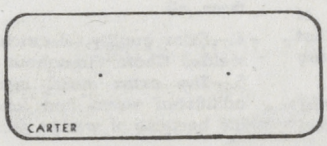
Rear Window

Plastic Shields for curved or flat Windows



7" x 20"

No. 11 ..... **$1.60 each**



10" x 25"

No. 12 ..... **$2.20 each**



LIQUID ADHESIVE

Can be used as an original coating or to enliven the tackiness of any adhesive surface. An exceptionally tacky adhesive in liquid form especially adapted for use on frost shield gaskets, sponge rubber or felt weather stripping. Brush applier on cork.

Liquid adhesive adheres firmly to glass, rubber, metal, wood and cloth. Convenient to apply. Supplied in 2-oz. (approx.) and 4-oz. (approx.) bottles.

Price, per dozen, 2-oz. (approx.) ..... **$ 6.60**

Price, per dozen, 4-oz. (approx.) **$10.50**

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

WINTER SUPPLIES

TRANSPARENT WATERPROOFING



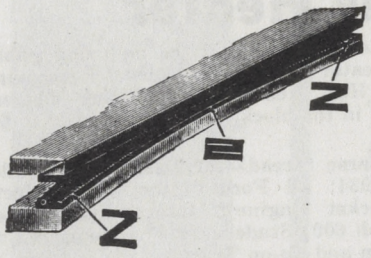
A transparent sealing compound recommended for use around top edge and sides of frost shields. Will positively prevent any moisture seepage inside the shield. To apply simply perforate sealed top with screw type stopper and squeeze tube as you run spout along top and sides of frost shield. To reseal, insert screw stopper in tube. Transparent waterproofing is excellent as a general purpose glass and windshield sealer.

Supplied in 2-oz. (approx.) tubes.

Price per dozen ..... **$ 6.60**

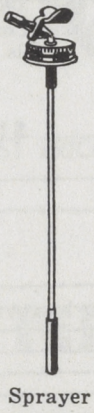
"Z" TYPE REPLACEMENT GASKET

Compensates for Irregularities of Windshield Glass



Patented non-porous "Z" Gasket especially adapted for sloping windshields where ordinary sponge gasket has a tendency to allow seepage, to slide, or fall off. INSTALL ON CLEAN DRY SHIELDS AND WINDOWS IN WARM DRY ATMOSPHERE.

75 (approx.) ft. pkge., 50" (approx.) strips ..... **$ 9.80**



Sprayer

GLASS CLEANER

Superior to ordinary Glass Cleaners, "Carter" Glass Cleaner removes all oily or greasy film from any glazed surface and leaves a clear, clean LINT-FREE glass.

Super-efficient summer or winter — it is especially recommended for use when installing "Carter" Frost or Sleet Shields.

8 ounce bottle ..... **$ .40 each**
One gallon jug ..... **2.95 each**
Sprayer for 8 ounce bottle ..... **.30 each**



CARTER "*Electric*" ENGINE HEATERS

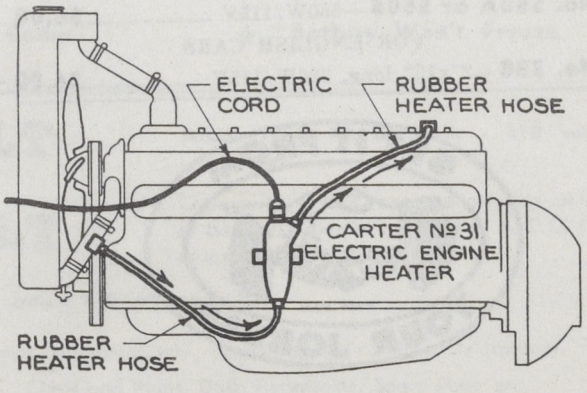
For Easy Winter Starting

110-115 Volt only C.S.A. APPROVED **Once Used - Always Used**

KEEP ENGINE WARM IN A COLD GARAGE AND WHEN PARKED OUTSIDE

No. 31

Universal Circulation Type for Cars, Trucks and Tractors



Prices complete with double Electric Cord.

No. 31-380—380W/115V **$13.90**
No. 31-660—660W/115V **$14.40**
No. 31-900—900W/115V **$14.40**

Shipping Weight—2¾ lbs.

Heater is supplied less hose, but with hose connections. Simply bolt Heater in some convenient spot on engine, car frame or fender, but below the Cylinder Head, preferably below water level in blocks. Connect to lower Radiator Hose, and to the side or to top of Cylinder Head, by drilling and tapping ⅜" pipe thread or through "T" Fitting at standard car heater connection.

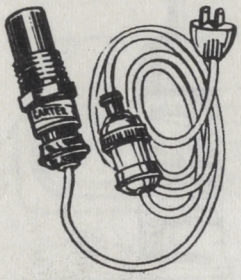
Model 31 is a most efficient Heater. 660 and 900 Watt are for quick short period engine warming, few minutes to an hour, depending on temperature.

CARTER "Electric" ENGINE HEATERS

For Easy Winter Starting

110-115 Volt only — C.S.A. APPROVED — **Once Used - Always Used**

KEEP ENGINE WARM IN A COLD GARAGE AND WHEN PARKED OUTSIDE



380W/115V

PATENTED

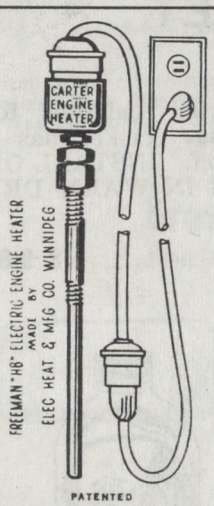
No. 7

For General Motors Cars - Block Installation

For Canadian made Chevrolet, Oldsmobile, Pontiac, Buick—1934-1950. To install simply remove threaded plug in block and replace plug by screwing in heater.

Price, complete with double Electric Cord **$6.50**

Shipping Weight—1½ lbs.



PATENTED

CARTER FREEMAN HB Engine Heater

This is the engine heater that was introduced to the trade and the motoring public last year, and which was so well received. The heater is easily installed by removing a cylinder headbolt and replacing it with the H.B. Heater. The heating element (400W/115V) which extends into the cooling liquid in the block gives plenty of heat for quick, easy winter starts.

No. 41 —Stud bolt app. 4" long—$\frac{7}{16}$" Dia. Coarse thread—for Cadillac, La Salle; all Chrysler Motor Co. products made after 1934; all Ford Motor Co. products made after 1936. Pontiac, Oldsmobile (not Rocket Engine); International Green Diamond K1 to K5; Hudson (1948 and after); Nash 600; Studebaker Champion and up to ¾ ton Studebaker trucks; Willys, Ford, Ferguson and Co-op Tractors.

No. 42 —Stud bolt app. 4" long—$\frac{7}{16}$" Dia. fine thread. For Packard (after 1939).

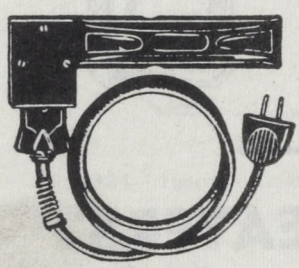
No. 45 —Stud bolt app. 4" long—½" Dia. coarse thread—For Studebaker Commander and one ton and larger Studebaker trucks, Reo trucks, beginning 1945 models 19, 20, and 21 with 245 and 288 engines.

Detailed installation instructions packed with each heater.

Price—**No. 41, 42, 45** —Complete with double Electric Cord **$10.20**

Shipping Weight—1¾ lbs.

CLAMP-ON TYPE



360W/115V

Make sure snug, firm heater contact to engine is made

No. 8A — Ford V-8, Monarch, Lincoln and Mercury, inc. 1948.

No. 8B—Ford Monarch Meteor, Mercury, 1949-50.

No. 8D—Chrysler Products and others (see below).

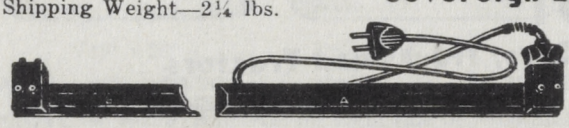
Shipping Weight 3 lbs.

Austin 10 H.P. 1939 to 1941	8D
Cadillac V-8 1937 to 1949 (2 required)	8D
Chrysler, All Models	8D
De Soto, All Models	8D
Dodge, All Models	8D
Graham 1937 to 1942	8D
Hudson 1936 to 1950	8D
Kaiser and Frazer 1946 to 1950	8D
Nash LaFayette, All— to and incl. 1940	8D
Nash 600, 1941 to 1950	8E
Nash 600, 1941 to 1949 $6.50	8E
Packard 1937 to 1949, 2 Req'd	8D
Plymouth, All Models	8D
Studebaker 1937 to 1950	8D
Studebaker Champion to 1950	8D
Terraplane 1936-37-38 Custom Model 72	8D
Willys 1937 to 1949 incl., Jeep	8D

Price complete with double Electric Cord **$6.50**

Sovereign ENGINE HEATERS

Shipping Weight—2¼ lbs.



A is for Right Side of Engine from Driver's Seat.
B is for Left Side of Engine (A is used mostly).

A very efficient Heater — Install flat against Cylinder Head on Manifold side if possible—make sure good and snug, firm Heater contact to Engine is made. No. 550 is 2" wide by 18" long.

No. 550A or 550B —550W/115V **$6.00**

FOR ENGLISH CARS

No. 330 —2"x12" long, 330W/115V **$6.00**



380W/115V

HOSE TYPE

No. 1 for 1¼" lower hose	$6.50
No. 2 for 1½" lower hose	6.50
No. 3 for 1¾" lower hose	6.50
No. 4 for 2" lower hose	6.50
No. 5 for 2¼" lower hose	6.50

Each heater is supplied with double Electric Cord.

Shipping weight—3 lbs.



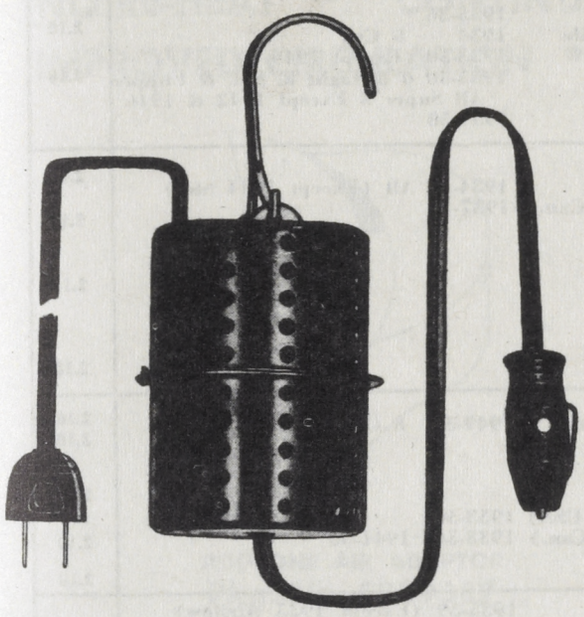
ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

BATTERY BOOSTERS

GENERAL ELECTRIC

BATTERY VITALIZER

MAKES STARTING EASIER IN COLD WEATHER



LIST PRICE $9.75

HELPS INCREASE BATTERY LIFE

The G-E BATTERY VITALIZER helps keep your battery fresh and energized, which aids in attaining maximum battery life.

EASY TO USE

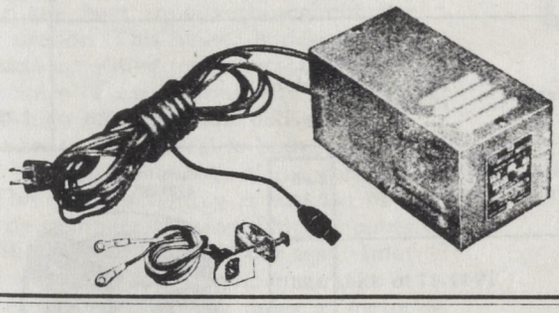
Simply plug into the nearest 115 volt 60 cycle A.C. outlet, hang it on your car steering wheel, remove the cigar lighter, and place the plug in the recepticle.

CARRY IT IN YOUR CAR

The G-E BATTERY VITALIZER is completely portable. It can be kept in your car all winter for handy use wherever you are.

CAT. No.	INPUT	OUTPUT	POLARITY
6RS934CA61	115 volts, 60 cyc.	1.25 amp., 6 volts	Positive ground
6RS934CA62	115 volts, 60 cyc.	1.25 amp., 6 volts	Negative ground

CTL
BATTERY BOOSTER



★ Maximum Performance from Electrical Accessories

★ Quicker Starting ★ Brighter Lights

★ Better Radio ★ Battery Won't Freeze

6 VOLT

12 VOLT

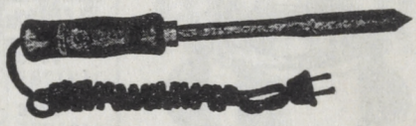
Model 102C for 60 cycle - 110 volt supply line $15.25

Charges at 4 to 2 amps. depending on condition of battery. Complete with A.C. & D.C. cords and plugs, dash receptacle, fuse, etc.

Model 110C for 60 cycle - 110 volt supply line $18.00

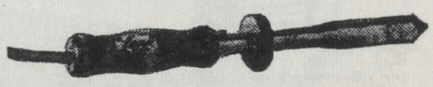
Charges at 1¼ amps. approximately, depending on condition of battery. Complete with A. C. and D. C. Cords and Plugs, Dash Receptacle, Spare Fuse, etc.

ELECTRIC SOLDERING IRON



A quality Iron at a popular price--Heavy Chrome Plate-Nickel-Chrome Wire Heating Elements--Swaged Tube--Replaceable Tips.

No.	Tips	Net
150	Standard Type	$4.50



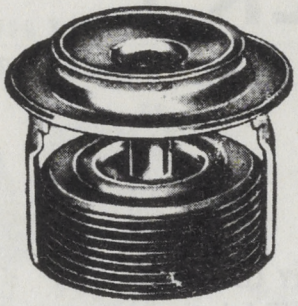
A rugged-built popular priced iron featuring metal clad heating elements, heat baffles, heavy chrome finish, swaged tube.

No.	Tips	Net
750	Standard Type	$4.95

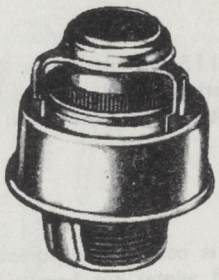
D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

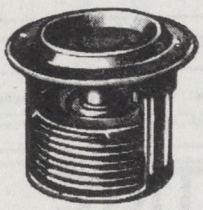
HARRISON THERMOSTATS



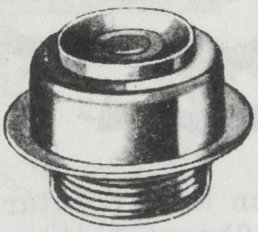
Part Nos. 1242, 3121252, 3123993, 3121301, 3122282, 3122283, 3122284, 3122285, 3123894, 3123994, 3121280, 3124023, 3124025



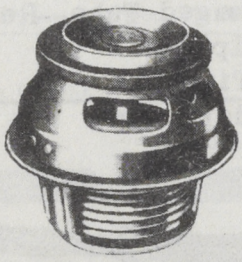
By-Pass Thermostats
Part Nos. 3124082, 3124231, 1266, 1267, 1276, 1277



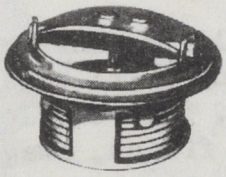
Part Nos. 3125368, 3125369



Part Nos. 1232, 1233



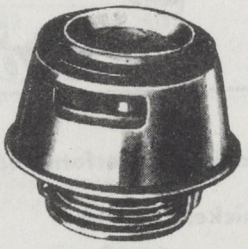
By-Pass Thermostats
Part Nos. 1244, 1245



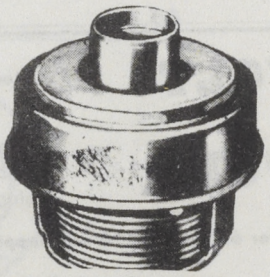
By-Pass Thermostat
Part No. 1293

Part No.	Temperature	Applications	LIST PRICE
1254 3122282	Medium	Buick 1933-50 All Ford Jeep Frazer 1946-51 Graham 1935 73 & 74 1936 76, 77, 81, 83 1937-40 All Kaiser 1946-51 LaSalle 1935-36 Oldsmobile 1934 6 Cyl. 1935-50 (Except 1949 8) Packard 1935-50 6 & Light 8, Std. & Clipper All Super 8 Except 1942 & 1946 Willys 1937-50	2.10
1251 3122283	High		2.10
1270 3122284	Special-High		2.10
3122285	Extra-High		2.10
3121301	Low	Chevrolet 1934-50 All (Except 1934 Std.) Pontiac (Can.) 1937-40	2.10
1254 *3121254* 3123993	Medium		2.10
1251 *3121251* 3123994	High		2.10
1270 *3121280* 3123995	Extra-High		2.10
3124023	Medium	Oldsmobile 1949-50 8 Cyl.	2.10
3124025	Special-High		2.10
1242 3121242	Medium	Pontiac (USA) 1933-50 Pontiac (Can.) 1933-36; 1941-50	2.10
1252 3121252	High		2.10
3123894	Special-High		2.10
1266 3121266	Medium	Chrysler 1935-39 (Except 1935 Airflow) De Soto 1935-39 (Except 1935 Airflow) Dodge 1935-39 Hupmobile 1936-41 Plymouth 1936-39 De Luxe	3.20
1267 3121267	High Special-High		3.20
1234 *1230* 3121230	Medium	Studebaker 1939-50 Champion	2.00
1235 *1231* 3121231	High Special-High		2.00
3125368	Medium	Ford 1949-50 8 Cyl. Mercury 1949-50	2.10
3125369	Special-High		2.10
1285 3121285	Medium	Ford Mercury 1937-48 8 Cyl. (Except Model 60) 1939-48	2.25
1286 3121286	High Special-High		2.25
1259	Medium	Ford 1932-36 V8 Lincoln-Zephyr 1940-42	2.80
1263	High		2.80
1274 3121274	Medium	Ford 1941-47 6 Cyl.	3.20
1275 3121275	High Special-High		3.20
1244	Medium	Chrysler 1940-50 De Soto 1940-50 Dodge 1940-50 Plymouth 1940 Deluxe; 1941-50 Spec. Deluxe	3.20
1245 3121245	High Special-High		3.20
1293	Medium	Chrysler 1934 De Soto 1934 Dodge 1934 Hudson 1934-1935 (Except LTS, KS, G) Plymouth 1934 Deluxe Terraplane 1934 (Except KS)	3.60
1296	Medium	Chrysler 1935 Airflow De Soto 1935 Airflow Plymouth 1935 Deluxe	3.60

Part Nos. 1212, 1213, 3121285, 3121286



By-Pass Thermostats
Part Nos. 1274, 1275



By-Pass Thermostat
Part No. 1296

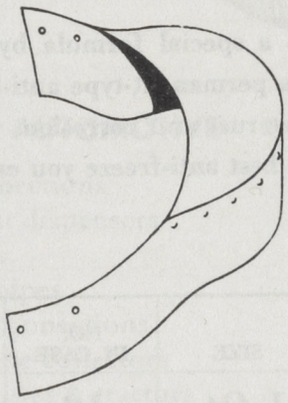
ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

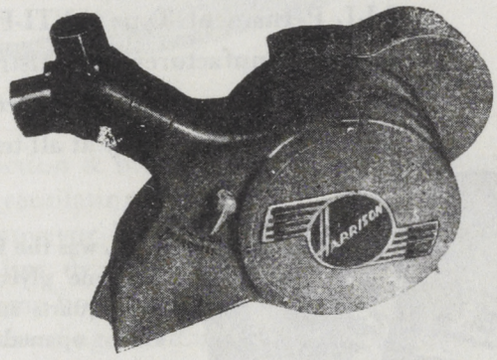
HARRISON

AIR FLOW HEATING

FOR 1949-50 CHEV. 10-12 SERIES; 1949-50 PONTIAC 20-22 SERIES

NO RE-HEAT • CONTINUOUS SUPPLY OF HOT FRESH AIR • IMPROVED CIRCULATION • REDUCED WINDOW STEAMING •





ADD ONE AIR ADAPTOR
Pkg. No. 5839387

TO

THE HARRISON DASH TYPE HEATER
No. 5839331
List Price $37.75

For **MODERN AIR FLOW HEATING AT LOW COST**

AIR ADAPTER PACKAGE

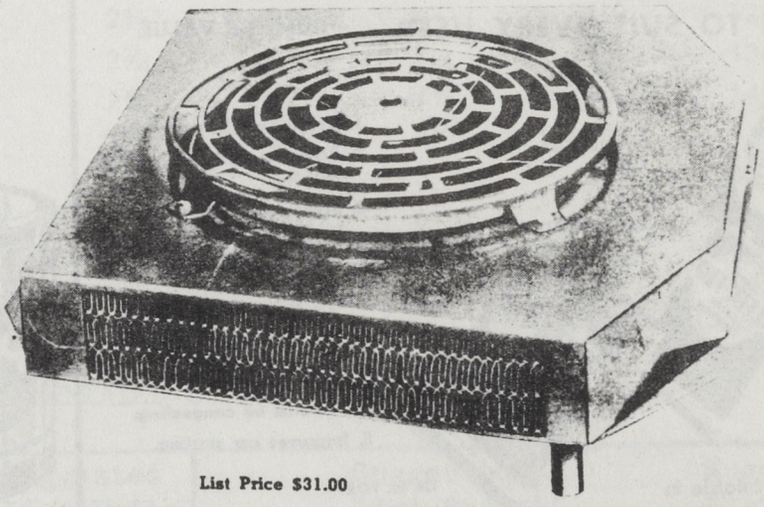
U.M.S. PART No.	DESCRIPTION	APPLICATION		LIST PRICE
5839387	Air Adaptor Package	Chevrolet 10 - 12 Pontiac 20 - 22	1949 - 50 1949 - 50	2.40

UNDERSEAT HEATER

The improved Harrison Underseat Heater is a high output heater built to distribute heat equally throughout the car interior. This heater is designed to operate according to the most advanced principles of car heating. Its propeller type high efficiency fan delivers abundant heat at floor level to both the front and rear compartments of the car.

The whole assembly is encased in a sturdy compact housing which mounts on the floor under the front seat, Inlet and outlet pipe arrangements make it unnecessary to drill for pipes or motor on any General Motors car body where a removable cover plate is provided in the floor pan (including 1950).

Complete installation instructions as well as a template for drilling (when necessary) included in each heater package.



List Price $31.00

SPECIFICATIONS

OVER-ALL DIMENSIONS: 13¾" x 12¾" x 2⅝"
COLOR: Light beige with black trim.
SWITCH: Variable speed with attractive Tenite Knob. Dash mounting.
SHIPPING WEIGHT: Individual carton, 15 lbs. Packed 4 to a container, 64 lbs.

- **BALANCED HEAT DISTRIBUTION**
- **ENGINEERED CAR HEATING**
- **UNDERSEAT MOUNTING**
- **GENEROUS HEAT OUTPUT**
- **QUIET OPERATION**
- **EASY INSTALLATION**

U.M.S.
PART No. 5838163

Complete with all necessary installation fittings

HARRISON
TYPE No. 183

D. ACKLAND & SON, Limited

Head Office: WINNIPEG • *Branches:* DAUPHIN, BRANDON, CALGARY AND EDMONTON.

WINTER SUPPLIES

C-I-L *Permanent Type* ANTI-FREEZE

IS MADE FOR CUSTOMERS WHO WANT THE BEST

C-I-L Permanent Type ANTI-FREEZE is made to a special formula by Canada's leading manufacturer of industrial chemicals. It is a permanent-type anti-freeze . . . non-evaporating, protects the cooling system against rust and corrosion, won't boil off or foam, flows freely at all temperatures. It's the best anti-freeze you can sell . . . *at any price.*



C-I-L was the FIRST to market ethylene glycol anti-freeze in *both* quarts and gallons. Thus, C-I-L opened up new sales opportunities to the trade . . . made possible more assured and more economical protection for your customers.

SIZE	NO. IN CASE	SUGGESTED UNIT RETAIL PRICE
1 Qt.	12	$1.45
1 Gal.	4	$5.15

PLAIN METHYL HYDRATE

DEALER'S NET PRICE	2.15	Per Gal.
	9.70	Per 5 Gals.

KLEEN-FLO
MOTOR
CONDITIONER

A SIZE TO SUIT EVERY USER SUMMER VALUE



4 oz. TANKFULL SIZE

32 oz. ECONOMY SIZE

1. Keeps Fuel System clean.
2. Steps up power & performance.
3. Prevents & removes carbon formation & varnish coating.
4. Frees sticky valves & rings.

WINTER VALUE

1. Overcomes & Prevents frozen lines.
2. Prevents oil congealing.
3. Improves car starting.

Also available in drum quantities.

128 oz. FOR SMALLER FLEETS

Liquid Kleen-Flo MOTOR CONDITIONER

4-Oz. (Can)	6	22 Lbs.	.35
32-Oz. "	2	50 Lbs.	1.90
128-Oz. "	½	46 Lbs.	6.95

SUPER PYRO ANTI-FREEZE

ETHYL HYDRATE BASE



DRUMS
From Drums ..... 2.35 per

SEALED GALLON CANS
Per Gallon Can ..... 2.60 per

SEALED QUART CANS
Per Quart Can ..... .65 per

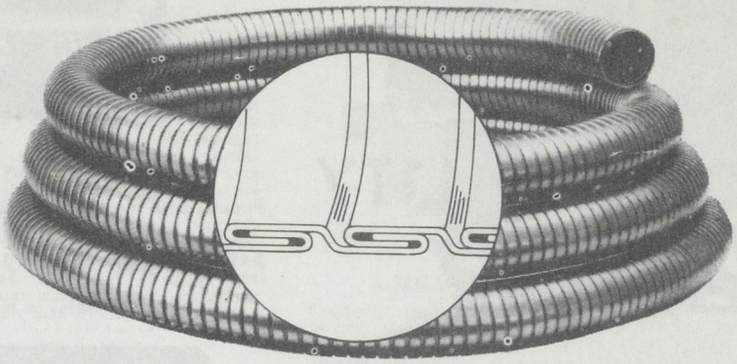
HYDROMETERS
New Style .....

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

STEELFLEX

INTERLOCKED GALVANIZED STEEL FLEXIBLE TUBING

STANDARD WEIGHT TYPE U-100

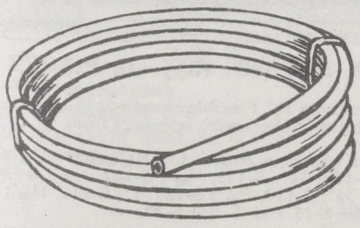


AUTOMOTIVE • APPLICATIONS • INDUSTRIAL

Hot air heater connections
Flexible spouts—oil dispensers
Bendable tail-pipes
Bendable exhaust pipes
Oil breather tube connections
Garage Exhaust fume collectors
Exhaust hose—engines & tractors
Suction & blower hose . . . dust & fume collectors, ventilating & blow-pipe systems
Conveyor hose . . . sawdust, shavings, chips, dust, lint, fly ash
Spray hose . . . agricultural dusters and fog sprayers
Armoring conduit . . . electrical wiring, refrigeration supply lines

Inside Dia. In.	Outside Dia. In.	Price Per 100 Ft.	Inside Dia. In.	Outside Dia. In.	Price Per 100 Ft.	Inside Dia. In.	Outside Dia. In.	Price Per 100 Ft.
1/2	5/8	$16.50	1 5/8	1 3/4	$43.00	2 3/4	2 7/8	$76.50
9/16	11/16	18.00	1 11/16	1 13/16	44.50	2 13/16	2 15/16	80.00
5/8	3/4	19.50	1 3/4 *	1 7/8 *	46.00	2 7/8	3	83.25
11/16	13/16	21.00	1 13/16	1 15/16	47.50	2 15/16	3 1/16	86.75
3/4	7/8	22.50	1 7/8	2	49.00	3	3 1/8	90.00
13/16	15/16	24.00	1 15/16	2 1/16	50.00	3 1/8	3 1/4	94.50
7/8	1	25.50	2 *	2 1/8 *	51.00	3 1/4	3 3/8	99.25
15/16	1 1/16	27.00	2 1/16	2 3/16	52.75	3 3/8	3 1/2	104.00
1	1 1/8	28.50	2 1/8	2 1/4	54.50	3 1/2	3 5/8	108.50
1 1/16	1 3/16	29.75	2 3/16	2 5/16	57.00	3 3/4	3 7/8	117.00
1 1/8	1 1/4	31.00	2 1/4 *	2 3/8 *	59.25	4	4 1/8	125.00
1 3/16	1 5/16	32.50	2 5/16	2 7/16	61.50	4 1/4	4 3/8	135.50
1 1/4 *	1 3/8 *	34.00	2 3/8	2 1/2	63.50	4 3/8	4 1/2	140.00
1 5/16	1 7/16	35.50	2 7/16	2 9/16	66.00	4 1/2	4 5/8	146.50
1 3/8	1 1/2	37.00	2 1/2 *	2 5/8 *	68.00	5	5 1/8	152.50
1 7/16	1 9/16	38.50	2 9/16	2 11/16	70.00	6	6 1/8	216.00
1 1/2 *	1 5/8 *	40.00	2 5/8	2 3/4	71.75	7	7 1/8	260.00
1 9/16	1 11/16	41.50	2 11/16	2 13/16	74.25	8	8 1/8	300.00

SEAMLESS ANNEALED COPPER TUBING

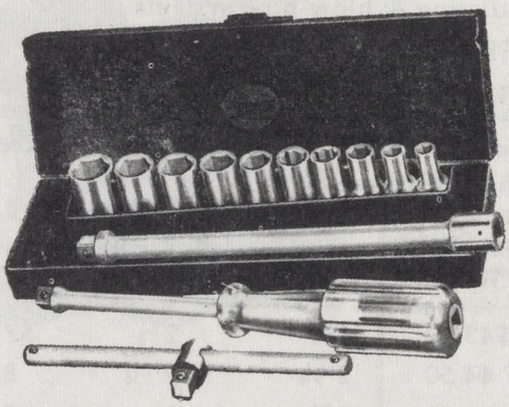


	Suggested List Price per 25 ft.		Suggested List Price Per 25 ft.		Suggested List Price per 25 ft.
1/8"	2.25	1/4"	3.75	1/2"	6.75
5/32"	4.20	5/16"	4.50	5/8"	9.00
3/16	3.00	3/8"	5.25	3/4"	10.50
		7/16"	6.75		

TOOLS OF QUALITY

by Herbrand

THE GREATEST NAME IN TOOLS SINCE 1881



MIDGET SOCKET SET NO. MA-50½

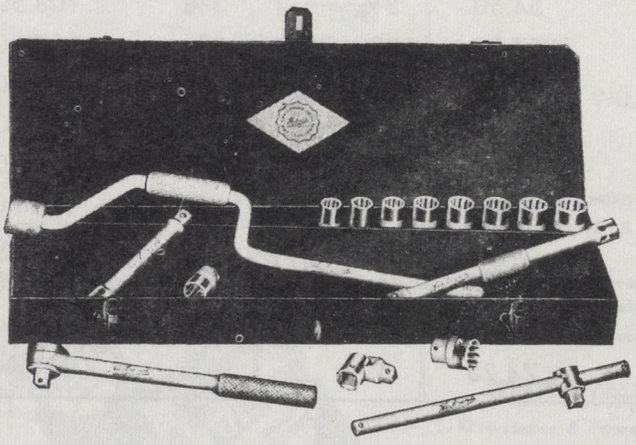
13 Pieces

Takes care of the popular sizes of small nuts used on aircraft, radio, automotive electrical and other equipment.

Contents: Ten Hot Forged Midget Sockets listed on page 6. Midget ¼" Drive Handles, M-20, M-21 and M-22.

SET NO. MA-50½, in fitted metal box. Weight 15 ozs.

NET PRICE, complete..... **$11.48**



STANDARD SOCKET SET NO. SA-72½—16 PIECES

An assortment that comprises 10 of the most popular sizes of Hot Forged Sockets and 6 lightweight Handle Units. It meets the needs of most mechanics and there is ample room in the substantial metal box for additional Sockets and Handles.

Contents: 10 "Van-Chrome" 12-point Sockets Nos. S-114, 7/16"; S-116, ½"; S-118, 9/16"; S-120, 5/8"; S-121, 21/32"; S-122, 11/16"; S-124, ¾"; S-125, 25/32"; S-126, 13/16"; S-128, ⅞". Reversible Ratchet No. S-10 New Improved Design, Speed Handle No. S-17; Sliding T Handle No. S-21; Extension 5" long No. S-27; Extension 10" long No. S-28 and Universal Joint No. S-35.

SET NO. SA-72½, in metal box.

NET PRICE..... **$36.75**

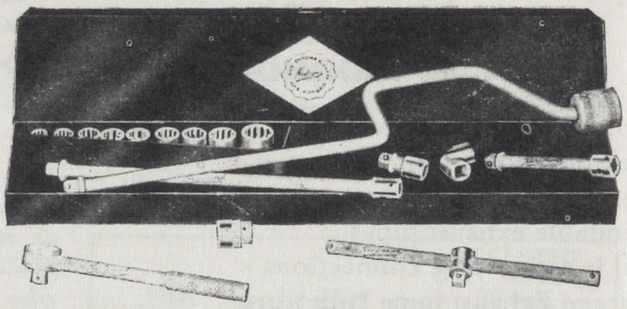


JUNIOR FLEX SET No. JA-60½

Popular with mechanics, electricians and car owners.

Contents, total of 9 pieces:—"Van-Chrome" 12-point Sockets Nos. J-112, J-114, J-116, J-118, J-120, J-122, J-124, providing a range of opening sizes from ⅜" to ¾" inclusive. Junior Flexible Handle J-13. T Handle Bar J-33.

SET No. JA-60½, in metal box. Weight 2 lbs. NET PRICE, complete..... **$11.97**

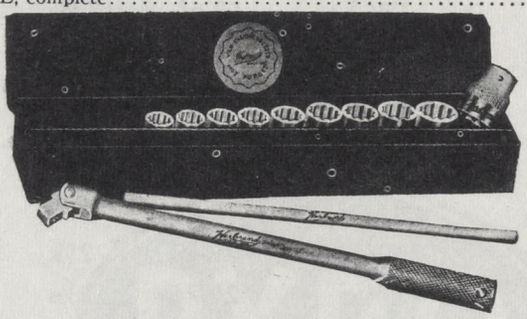


JUNIOR SOCKET SET No. JA-61½

A well balanced assortment of Junior ⅜" drive Sockets and Handles which cover a wide range of service in automotive, electrical, aviation and refrigeration work.

Contents, total of 16 pieces:—7 "Van-Chrome" 12-point Sockets Nos. J-112, J-114, J-116, J-118, J-120, J-122, J-124, with opening sizes from ⅜" to ¾" inclusive. 8-point Sockets Nos. J-212, J-214, J-216 with openings of ⅜", 7/16", ½". Junior Reversible Ratchet J-10, new style with rounded handle. 17" Speeder No. J-17. Universal Joint J-35. Sliding T Handle J-21. Extensions, J-27, 5" long and J-29, 11" long.

SET No. JA-61½, in metal box. Weight 5 bs. 13 ozs. NET PRICE, complete..... **$27.82**



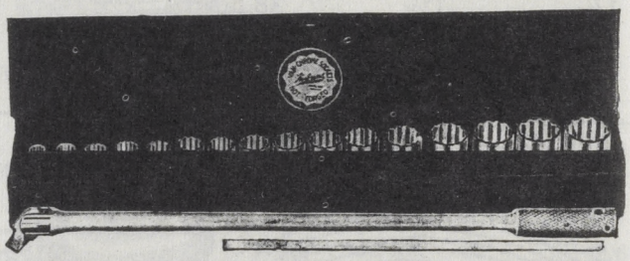
STANDARD FLEX SET NO. 71½—12 PIECES

This Set carries No. S-13 Flexible Handle and T Bar S-33, and ten selected "Van-Chrome" Sockets.

Contents: 10 "Van-Chrome" 12-point Sockets Nos. S-114, 7/16"; S-116, ½" S-118, 9/16"; S-120, 5/8"; S-121, 21/32"; S-122, 11/16"; S-124, ¾"; S-126, 13/16": S-128 ⅞"; S-130, 15/16". Flexible Offset Handle No. S-13 and T Handle Bar S-33.

SET NO. SA-71½ in metal box.

NET PRICE..... **$18.69**



STANDARD FLEX SET NO. 73½—18 PIECES

This popular set carries the extra long 18" Flexible Handle S-15 and the T Bar S-33. Also 16 Hot Forged 12-point Sockets with openings from ⅜" to 1⅛".

Contents: 16 "Van-Chrome" Sockets Nos. S-112, ⅜"; S-114, 7/16"; S-116, ½"; S-118, 9/16": S-119, 19/32": S-120, 5/8": S-121, 21/32"; S-122, 11/16"; S-124, ¾": S-125, 25/32"; S-126, 13/16"; S-128, ⅞": S-130, 15/16"; S-132, 1"; S-134, 1 1/16"; S-136, 1⅛". 18" Flexible Offset Handle S-15 and T Bar S-33.

SET NO. SA-73½ in metal box.

NET PRICE..... **$30.06**

Heavy Duty Series "Van-Chrome" Socket Sets

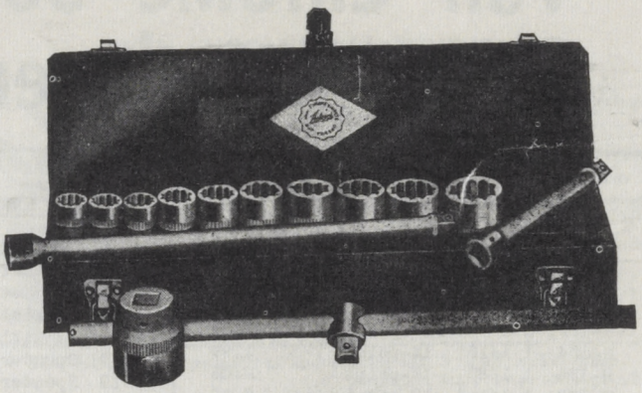
3/4" Square Drive

Every thoroughly equipped mechanic needs a complete set of "Van-Chrome" Heavy Duty Sockets. These large diameter sockets have many applications and are essential for truck, bus, tractor and industrial work. They are also needed for work on farm and power machinery, road building equipment and all heavy machinery units.

The "Van-Chrome" Heavy Duty Socket line insures faster and easier work because it is designed for maximum handling efficiency. All unnecessary weight and clumsiness has been dispensed with. The sockets have straight walls and even though very thin they can be depended upon to give uninterrupted service under the most strenuous conditions. These 12-point sockets cannot slip from the handle end because they are equipped with lock-on feature which securely holds them in place.

Sockets and Handle Attachment are Hot Forged from a special analysis Chrome Molybdenum Steel and are heat treated all the way through. Handsomely finished in Herbrand's lustrous triple nickel plate with highly buffed side walls.

The tool boxes are constructed of heavy gauge steel, finished in durable baked blue wrinkle, and fitted with carrying handle and locking clasps.



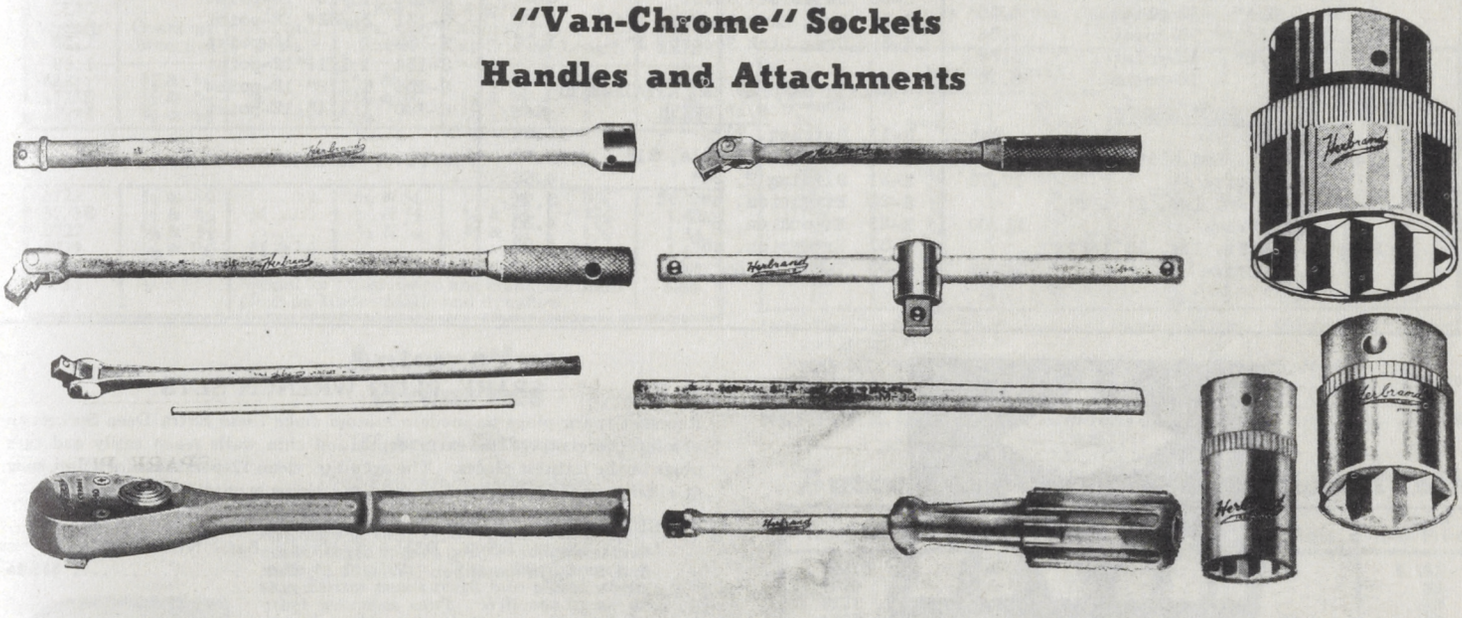
HEAVY DUTY SOCKET SET NO. HA-80½

Contents, total of 14 pieces: 11 "Van-Chrome" Heavy Duty Nos. Sockets H-128, 7/8"; H-130, 15/16"; H-132, 1"; H-134, 1 1/16"; H-136, 1 1/8"; H-138A 1 3/16"; H-140, 1 1/4"; H-144, 1 3/8"; H-146, 1 7/16"; H-148, 1 1/2"; H-152, 1 5/8". Sliding T Handle No. H-21. Extensions No. H-29 and No. H-31.

SET NO. HA-80, in fibre box. Weight 11 lbs.

NET PRICE, complete.....**$37.94**

"Van-Chrome" Sockets Handles and Attachments



SOCKET HANDLES AND ATTACHMENTS 1/4" DRIVE		Net
M-10	Ratchet 5 1/4"	4.93
M-13	Flexible Handle 6"	2.66
M-20	Spinner Handle 6"	1.80
M-21	Sliding T, 4 1/2"	1.31
M-22	Extension 4 1/2"	.90
M-23	Extension 2"	.86
M-33	T-Handle Bar 4 1/2"	.37
M-35	Universal Joint	2.77
M-45	Phillips Bit	1.50
SOCKETS, 1/4" DRIVE		Net
M-606 3/16"	6-point	.64
M-607 7/32"	6-point	.64
M-608 1/4"	6-point	.64
M-609 9/32"	6-point	.64
M-610 5/16"	6-point	.64
M-611 11/32"	6-point	.64
M-612 3/8"	6-point	.64
M-614 7/16"	6-point	.64
M-808 1/4"	8-point	.64
M-810 5/16"	8-point	.64
M-812 3/8"	8-point	.67

SOCKET HANDLES AND ATTACHMENTS 3/8" DRIVE		
J- 9	Speedratchet	9.94
J-10	Ratchet, 6 5/8"	5.88
J-13	Flexible Handle, 8 5/8"	3.74
J-17	Speeder, 17"	2.74

SOCKET HANDLES AND ATTACHMENTS CON'D. 3/8" DRIVE		NET
J-20	Speeder, 34"	3.45
J-21	Sliding T, 8"	1.80
J-25	Extension, 3"	1.57
J-27	Extension, 5"	1.72
J-29	Extension, 11"	2.06
J-33	T-Handle Bars, 6 1/2"	.41
J-35	Universal Joint	2.96
J-37	Screw Driver	1.39
J-39	Drag Link Socket	1.24
J-45	Screw Driver	1.42
J-46	Screw Driver	1.42
J-47	Screw Driver	1.42
SOCKETS, 3/8" DRIVE		Net
J-112 3/8"	12-point	.82
J-114 7/16"	12-point	.82
J-116 1/2"	12-point	.82
J-118 9/16"	12-point	.82
J-120 5/8"	12-point	.90
J-122 11/16"	12-point	.97
J-124 3/4"	12-point	.97
J-212 3/8"	8-point	.94
J-214 7/16"	8-point	.94
J-216 1/2"	8-point	.94
J-318 9/16"	12-point, Flex.	2.96
J-320 5/8"	12-point, Flex.	2.96
J-322 11/16"	12-point, Flex.	3.27
J-324 3/4"	12-point, Flex.	3.27
J-414 7/16"	12-point, Deep	1.16

SOCKETS 3/8" DRIVE CONT'D.			Net
J-416 1/2"	12-point, Deep		1.20
J-418 9/16"	12-point, Deep		1.24
J-420 5/8"	12-point, Deep		1.24
J-422 11/16"	12-point, Deep		1.39
J-424 3/4"	12-point, Deep		1.50
J-509 9/32"	4-point		.94
J-510 5/16"	4-point		1.05
J-512 3/8"	4-point		1.09
J-608 1/4"	6-point		.82
J-610 5/16"	6-point		.82
J-612 3/8"	6-point		.82
J-614 7/16"	6-point		.82
J-616 1/2"	6-point		.82
J-618 9/16"	6-point		.82
J-620 5/8"	6-point		.90
J-622 11/16"	6-point		.97
J-624 3/4"	6-point		.97
J-812 3/8"	6-point, Deep		1.09
J-814 7/16"	6-point, Deep		1.09
J-816 1/2"	6-point, Deep		1.12
J-818 9/16"	6-point, Deep		1.16
J-820 5/8"	6-point, Deep		1.16
J-822 11/16"	6-point, Deep		1.31
J-824 3/4"	6-point, Deep		1.39
J-826 13/16"	6-point, Deep		1.42
J-912 3/8"	6-point, Flex.		2.96
J-914 7/16"	6-point, Flex.		2.96
J-916 1/2"	6-point, Flex.		2.96

Van Chrome Sockets, Handles and Attachments . . . Contd.

SOCKETS 3/4" DRIVE

			Net
H-128	7/8"	12-point	1.54
H-130	15/16"	12-point	1.80
H-131	31/32"	12-point	1.69
H-132	1	12-point	1.69
H-134	1 1/16"	12-point	1.99
H-136	1 1/8"	12-point	2.06
H-138A	1 3/16"	12-point	2.10
H-140	1 1/4"	12-point	2.33
H-142	1 5/16	12-point	2.44
H-144	1 3/8"	12-point	2.66
H-146	1 7/16"	12-point	2.77
H-148	1 1/2"	12-point	3.00
H-152	1 5/8"	12-point	3.67
H-154	1 11/16"	12-point	3.89
H-156	1 3/4"	12-point	4.55
H-158	1 13/16"	12-point	4.86
H-160	1 7/8"	12-point	5.39
H-164	2"	12-point	5.70

TORQUE WRENCH

		Net
S-55	105 Ft. Lbs. 19" 1/2" Drive	17.75
S-60	0-100 Ft. Lbs. 19 1/2" 1/2" Drive	21.00
S-65	0-150 Ft. Lbs. 19 1/2" 1/2" Drive	24.46

SOCKET HANDLES AND ATTACHMENTS 1/2" DRIVE

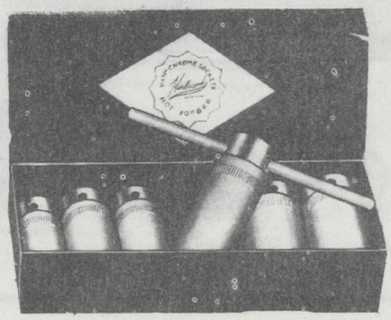
		Net
S- 8	Ratchet Adapter	7.80
S-10	Ratchet, 10"	7.52
S-11	Ratchet, 15"	8.08
S-13	Flexible Handle 12"	4.97
S-15	Flexible Handle 18"	5.32
S-17	Speeder, 15"	3.50
S-19	Speeder, 17"	3.81
S-20	Speeder, 34"	4.69
S-21	Sliding T, 11"	2.40
S-22	Sliding T, 16"	2.70
S-27	Extension, 5"	1.80
S-28	Extension, 10"	2.32
S-30	Extension, 33"	5.53
S-33	T-Handle Bar, 11"	.45
S-35	Universal Joint	3.37
S-37	Drag Link Socket, 3/4"	1.50
S-39	Drag Link Socket, 1"	1.72

SOCKET HANDLES AND ATTACHMENTS 3/4" DRIVE

		Net
H-11	Ratchet, 21"	19.28
H-15	Flexible Handle, 21"	10.22
H-21	Sliding T, 20"	4.65
H-25	Extension, 4"	3.71
H-29	Extension, 8"	4.30
H-31	Extension, 16"	5.07
H-33	T-Handle Bar, 20"	.97

SOCKETS 1/2" DRIVE

			Net
S-112	3/8"	12-point	.97
S-114	7/16"	12-point	.97
S-116	1/2"	12-point	.97
S-118	9/16"	12-point	.97
S-118V	9/16"	6-point Ford Conn. Rod.	1.19
S-119	19/32"	12-point	.97
S-120	5/8"	12-point	1.05
S-121	21/32"	12-point	1.05
S-122	11/16"	12-point	1.05
S-124	3/4"	12-point	1.27
S-125	25/32"	12-point	1.27
S-126	13/16"	12-point	1.27
S-128	7/8"	12-point	1.35
S-130	15/16"	12-point	1.39
S-131	31/32"	12-point	1.28
S-132	1	12-point	1.52
S-134	1 1/16"	12-point	1.69
S-136	1 1/8"	12-point	1.80
S-140	1 1/4"	12-point	2.06



Extra Deep Socket and Spark Plug Wrenches

1/2" Square Drive—Thin Straight Walls

Hot Forged from Chrome Molybdenum Steel

In addition to fitting all spark plugs these Extra Deep Sockets are invaluable for work on body bolts, spring clips and many other places where an extra long reach is necessary. Designed with 1/2" square drive opening for use with standard handles and cross drilled so that a sliding T bar may be used. Hot Forged and heat treated to impart unbreakable strength. The side walls are straight and thin for clearance and the 12-point openings are smooth and deep, insuring an accurate, positive fit. Knurled, chrome plated and polished.

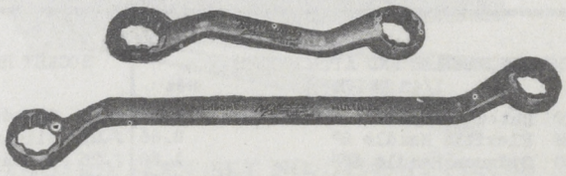
Number	Openings	Length	Net Price Each
DS-16	1/2	3	$1.72
✣DS-18	9/16	3	1.72
xDS-20	5/8	3	1.84
*DS-22	11/16	3	1.84
DS-24	3/4	3	1.84
△DS-26	13/16	3	1.91
DS-28	7/8	3 1/4	2.21
†DS-28B	57/64	3 1/4	2.21
DS-30	15/16	3 1/4	2.21
‡DS-32	1	3 1/4	2.29
¶DS-36	1 1/8	3 1/4	2.59

✣ Fits A.C. 10 mm Plugs. x For 1941 10 mm in Buick, Cadillac, Chevrolet, Packard, also A.C. 10 mm plugs 1941. *For Champion and Auto-Lite 10 mm Plugs. △Fits 14 mm Plugs. †Extra Thin for Buick up to and including 1940. ‡Fits 18 mm Plugs. ¶For Ford A and 1932 V-8.

SPARK PLUG WRENCH SETS

Recessed spark plugs on modern motors make these Extra Deep Sockets an absolute necessity. The extra depth and thin walls reach easily and turn plugs in the tightest places. The accurate, clean 12-points assure a firm, snug fit eliminating the danger of cracked porcelains or mutilated plugs.

SET No. DS-7½ contains one each DS-26, DS-28, DS-28B, DS-30, DS-32, DS-36, DSH-6 T Handle Bar. NET PRICE, No. DS-7½, in metal box. Weight 3¾ lbs. **$15.15**



"Van-Chrome" Multihex Box Wrenches

45° Offset Patterns

Drop Forged from Chrome Molybdenum Steel

Refinements of speed, efficiency and moderate price make these wrenches highly acceptable. They have different twelve-point graduated openings in each end, and the abrupt offset of the heads reaches sunken nuts and gets around obstructions. The extra thin side walls and generous leverage have also contributed to their universal approval. Heat treated their entire length to insure dependable service. Finished in velvety smooth satin nickel with heads brightly polished.

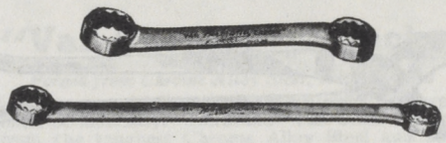
SHORT OFFSET PATTERN

Wrench No.	Openings Broached	For U.S. Std. Nuts	For Hex. Cap Screws	For S.A.E. Std. Nuts and Cap Screws	Length	Net Price Each
4723	3/8 & 7/16	.....	3/16 & 1/4	....1/4	4 1/2	$1.13
4725B	1/2 & 9/16	1/4.....	5/16 & 3/8	5/16 & 3/8	5 1/4	1.20
4727A	5/8 & 11/16	....3/8	7/16.....	7/16.....	6	1.31

LONG OFFSET PATTERN

3723	3/8 & 7/16	.....	3/16 & 1/4	....1/4	8 1/2	$1.28
3725B	1/2 & 9/16	1/4.....	5/16 & 3/8	5/16 & 3/8	9	1.35
3727	9/16 & 5/8	.....	3/8 & 7/16	3/8 & 7/16	9 3/4	1.54
3727A	5/8 & 11/16	.....3/8	7/16.....	7/16.....	9 3/4	1.54
3729A	3/4 & 25/32	.....7/16	1/2.....	1/2.....	11	1.80
3731B	13/16 & 7/8	.....1/2	9/16 & 5/8	.....9/16	12 1/2	2.40
3733C	15/16 & 1	.....	.....3/4	5/8 & 11/16	14 1/2	2.51

WE SPECIALIZE IN STEEL CAP SCREWS



"Van-Chrome" Multihex Box Wrenches

10° and 15° Angle Patterns

Drop Forged from Chrome Molybdenum Steel

Easy knuckle clearance of an offset wrench, with the accessibility of a straight wrench applying a direct, powerful pull on the nut. Either side of the wrench may be used, and they have different 12-point openings in each head with extra thin side walls.

Made with two different degrees of offset heads—the Short Pattern 15° and the Long with 10° angle heads—and they are available in all the popular opening sizes. Smoothly ground all over and double plated in satin nickel with the heads brightly polished.

SHORT 15° PATTERN

Wrench No.	Openings Broached	For U.S. Std. Nuts	For Hex. Cap Screws	For S.A.E. Std. Nuts and Cap Screws	Length	Net Price Each
6723	3/8 & 7/16	.....	5/16 & 1/4	.....1/4	4	$1.12
6725B	1/2 & 9/16	1/4.....	5/16 & 3/8	5/16 & 3/8	4 1/2	1.20
6727A	5/8 & 11/16	.....3/8	7/16.....	7/16.....	5	1.31

LONG 10° PATTERN

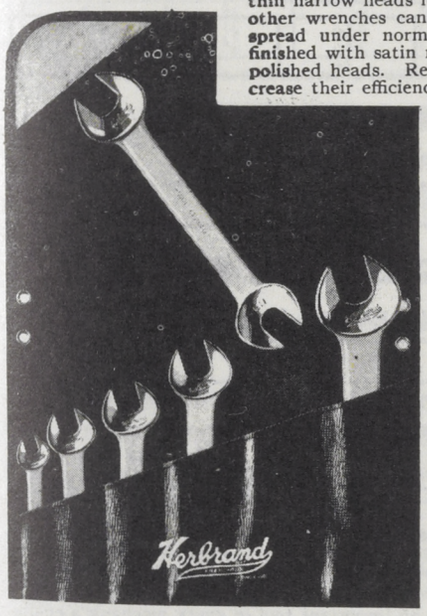
5723	3/8 & 7/16	.....	5/16 & 1/4	.....1/4	6 3/4	$1.15
5725B	1/2 & 9/16	1/4.....	5/16 & 3/8	5/16 & 3/8	7 7/8	1.42
5727	9/16 & 5/8	.....	3/8 & 7/16	3/8 & 7/16	8 7/8	1.54
5729	11/16 & 25/32	3/8 & 7/16	.....	.....	10	1.61
5731A	3/4 & 7/8	.....1/2	1/2 & 5/8	1/2 & 9/16	11 1/8	1.80
5733	7/8 x 1	Special for transmission and crankcase drain plugs on Hydro-Matic and dynaflow.				3.85

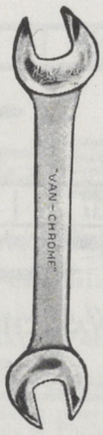
Automotive Wrenches

15° Angle Pattern

Drop Forged from Chrome Steel

The lightest, thinnest, longest and strongest wrenches of their type Heat treated their entire length to give positive toughness and uniform durability. The pointed jaws and thin narrow heads reach into places where other wrenches can't. Will not break or spread under normal usage. Beautifully finished with satin nickel grips and mirror polished heads. Refinements in design increase their efficiency and accessibility.





Set No. 1025D

SET NO. 1025D contains one each of Nos. 1723, 1025, 1027C, 1028S, 1731A and 1033C.
NET PRICE, in box.....$9.77; in pocket leatherette case.....$11.20

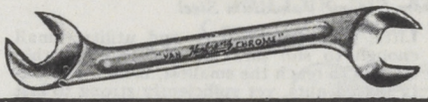
Set No. 1025A

SET NO. 1025A contains one each of Nos. 1721, 1723, 1025, 1725B, 1727, 1029, 1729, 1731B and 1033C.
NET PRICE, in bulk.....$13.23; in leatherette roll.....$15.92

Set No. 1025B

SET NO. 1025B contains 12 Wrenches, one each Nos. 1721, 1723, 1025, 1725, 1725B, 1727, 1027, 1729, 1029, 1731A, 1731B and 1033C.
NET PRICE, in bulk.....$17.67; in leatherette roll.....$20.89

"VAN-CHROME" ELECTRICAL AND IGNITION WRENCHES



15° and 60° Angle Heads

Drop Forged from Chrome Vanadium Steel

Wrench No.	Openings Milled	Thickness Heads	Length	Dealer Net Price Each
H-1	7/16 & 17/32	5/32	7 1/4	$1.12
H-2	1/2 & 9/16	5/32	8	1.27
H-3	5/8 & 11/16	7/32	8	1.31
H-4	3/4 & 7/8	7/32	9	1.47

SET NO. H-80, two each of above wrenches, 8 in all, nickel finish. in pocket leatherette roll.....$10.88



"VAN-CHROME" TAPPET WRENCHES

Double End—15° Angle

Drop Forged from Chrome Vanadium Steel

Wrench No.	Openings Milled 15° Angle	Openings Milled 60° Angle	Thickness Heads	Length	Dealer Net Price Each
†81	13/64	15/64	7/64	3	$.90
*82	15/64	13/64	7/64	3	.90
‡83	7/32	1/4	7/64	3	.90
††84	1/4	7/32	7/64	3	.90
85	9/32	5/16	1/8	3 1/2	.97
**86	5/16	9/32	1/8	3 1/2	.97
87	11/32	3/8	9/64	4	.97
88	3/8	11/32	9/64	4	.97
89	7/16	1/2	11/64	4 1/2	1.20

†For Ford Ignition. *Auto-Lite and Bosch. ‡Delco. ††Remy. **Wagner and Remy.

SET NO. 97 contains one each Nos. 81, 82, 83, 84, 85, 86, 87.
NET PRICE, in flannel-lined leatherette roll.....$6.79
SET NO. 99 contains the nine wrenches above and No. 167-N Plier.
NET PRICE, in flannel-lined leatherette case.....$10.64

Automotive Wrench Selection Table

Wrench No.	Openings	Length	Thickness	Dealer Net Price
1021S	1/4 & 5/16	3 3/4	1/8	$ .83
1720	5/16 & 11/32	5	3/16	.83
1721	5/16 & 3/8	5	3/16	.83
1021	5/16 & 13/32	5	3/16	.83
1723	3/8 & 7/16	5	3/16	.83
1022	5/16 & 1/2	5	3/16	.94
1024	13/32 & 19/32	6 1/2	15/64	1.13
1725	7/16 & 1/2	6 1/2	15/64	1.13
1725A	7/16 & 9/16	6 1/2	15/64	1.13
1725B	1/2 & 9/16	6 1/2	15/64	1.13
1025	1/2 & 19/32	6 1/2	15/64	1.13
1026	1/2 & 11/16	7 1/4	17/64	1.28
1727	9/16 & 5/8	7 1/4	17/64	1.39
1027	19/32 & 11/16	7 1/4	17/64	1.35
1027C	9/16 & 11/16	7 1/4	17/64	1.35
*1027B	5/8 & 11/16	7 1/4	17/64	1.35
1728	9/16 & 3/4	8 5/16	19/64	1.73
1028	19/32 & 25/32	8 5/16	19/64	1.80
1028S	5/8 & 25/32	8 5/16	19/64	1.80
1729	5/8 & 3/4	8 5/16	19/64	1.73
1029	11/16 & 25/32	8 5/16	19/64	1.80
1029B	11/16 & 3/4	8 5/16	19/64	1.80
1029C	11/16 & 13/16	8 5/16	19/64	1.80
1731	3/4 & 13/16	9 3/8	23/64	2.29
1731A	3/4 & 7/8	9 3/8	23/64	2.29
1031	25/32 & 7/8	9 3/8	23/64	2.36
1731B	13/16 & 7/8	9 3/8	23/64	2.29
1032	25/32 & 31/32	9 3/8	23/64	2.36
1032B	13/16 & 15/16	9 3/8	23/64	2.36
1033A	7/8 & 15/16	9 3/8	23/64	2.36
1033	7/8 & 31/32	9 3/8	23/64	2.36
1733	7/8 & 1	10 3/4	27/64	3.08
1033C	15/16 & 1	10 3/4	27/64	3.08
1034	7/8 & 1 1/16	10 3/4	27/64	3.08
1034A	1 1/16 & 15/16	10 3/4	27/64	3.08
1734	7/8 & 1 1/8	10 3/4	27/64	3.08
1035	31/32 & 1 1/16	10 3/4	27/64	3.08
1735	1 & 1 1/8	12 1/4	31/64	4.20
1036B	1 1/16 & 1 1/8	12 1/4	31/64	4.20
1037	1 1/16 & 1 1/4	12 1/4	31/64	4.20
1737	1 1/8 & 1 1/4	12 1/4	31/64	4.20
1037A	1 1/4 & 1 5/16	12 1/4	31/64	4.20

"VAN-CHROME" ELECTRICAL AND IGNITION PLIERS

Drop Forged from Chrome Vanadium Steel



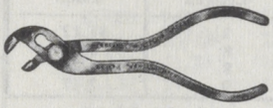
NO. 167
Finger Tip Control Handles

Little giants of capacity and utility; small enough to slip into the vest pocket; thin enough to reach the smallest, most awkwardly placed nuts, yet sufficiently strong to last a lifetime. Serves a wide range of electrical, ignition and radio work.

Range 0" to 7/16", length 4¼", thickness ⅛", weight 2 ounces.

NO. 167, hand polished nickel.

NET PRICE, each.....**$1.76**



NO. 167½
Full Grip Handles

NO. 167½-N, hand polished nickel.

NET PRICE, each.....

"Van-Chrome" No. 98 Electrical and Ignition Set



SET NO. 98

Where delicate adjustments have to be made on tiny screws and nuts in awkward corners, this practical combination set of wrenches, plier, screw driver and feeler gauge keeps the correct tools at your finger-tips.

SET NO. 98 contains 5 drop forged (not stamped) open end wrenches, combining the 10 necessary sizes from 13/64" to ½", with 15° and 60° heads; the 10-blade feeler gauge; adjustable midget plier No. 167; and insulated handle screw driver No. 310—the popular tools for electrical systems, appliances, radios and all small work.

NET PRICE, in flannel-lined leatherette roll.....**$9.00**

FOUR-WAY RIM WRENCHES—NEW SERIES

Chrome Vanadian or Carbon Steel

Extra Long for Wide Fender Clearance

DROP FORGED IN ONE PIECE—NO WELDS

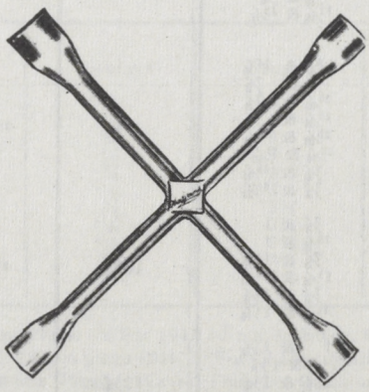
The modern car, with its wide apron fenders, requires this extra size 4-way Rim Wrench for clearance and to safeguard knuckles. Extra speed and leverage are provided with the 15-inch reach of this specially constructed 4-Way Rim Nut Tool. Solid, one-piece drop forging with no riveted or welded parts to loosen, bend or break. It has extra deep, solid forged sockets that fit down snugly over the nuts, and the backs of the heads are tapered to readily clear on all types of wheels. Heat treated from end to end, smoothly ground and attractively finished in satin nickel.

Openings 5/8", ¾", 13/16" and 7/8". Length 15". Weight 2 lbs. 12 ozs.

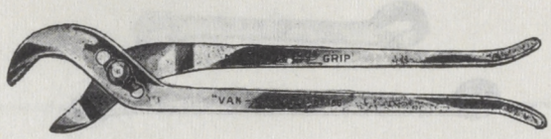
Available in Two Types:

NO. 1053X is drop forged from special Analysis High Carbon Steel.
NO. 1053X satin nickeled.

NET PRICE, each.....**$2.96**



NO. 1053X and 1054X



MULTIGRIP PLIERS NOS. 166 AND 166½

Originated by Herbrand to fit water pump pack nuts on all cars. These pliers serve such an extremely wide variety of uses that they are recognized as the most important tool in the mechanic's kit.

NO. 166 has 5 slip joint adjustments and range of jaw opening from ⅜" to 1⅞". Length 9½". Weight 8 ozs.

NO. 166-S, satin nickel, polished heads.

NET PRICE, each.....**$2.74**

"Van-Chrome" Chisels

Forged from Chrome Tungsten Tool Steel, Nickel Plated

The chief requisite of chisels is that they resist the severe demands made upon them and defy breakage. "Van-Chrome" Chisels are individually hammer forged from strong and tough Chrome Tungsten Alloy Steel made to Herbrand's special formula. Individually heat treated and tempered in perfectly timed electrically controlled furnaces. The cutting edge is beveled at the correct angle to remain sharp under extreme abuse. They are so finely tempered that they may be redressed with a file, yet stand up under the hardest usage.

Herbrand "Van-Chrome" Chisels are designed for perfect balance, and have octagon-shaped handles for better gripping. Each "Van-Chrome" Chisel is branded with the Herbrand mark of distinction, which is your guarantee of quality. Nickel finish and rust-proof. Polished blades.



FLAT CHISELS

Cat. No.	Size Stock	Width of Bit	Length	Net Price Each
400	5/16	5/16	5	**$ .64**
401	5/16	3/8	5	**.64**
402	3/8	1/2	6	**.75**
403	1/2	5/8	6	**.83**
404	5/8	3/4	7	**1.24**
405	3/4	7/8	8	**1.72**
405½	3/4	7/8	16	**2.47**
406	7/8	1	9	**2.17**
407	7/8	1	18	**3.04**



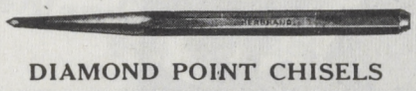
CAPE CHISELS

410	5/16	7/32	5	**.64**
411	3/8	5/16	6	**.71**
412	1/2	3/8	6	**.79**



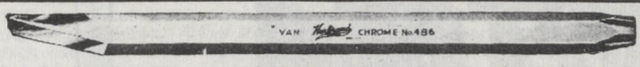
GOUGE CHISELS

420	5/16	7/32	5	**.67**
421	3/8	1/4	6	**.75**

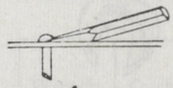


DIAMOND POINT CHISELS

430	5/16	5/64	5	**$ .64**
431	3/8	1/8	6	**.71**



"VAN-CHROME" RIVET SHEARING CHISELS



Designed to Shear Rivets Cleanly

Drop Forged from Chrome Vanadium Steel

Good rivet-shearing chisels are an important tool in every mechanic's equipment, because they save valuable parts by removing them quickly without damage.

The sharp nose on the cutting end of Herbrand Rivet-shearing Chisels is pitched at an angle that provides ample clearance for the hands, avoiding injury. The 10" and 14" lengths reach into the most confined quarters. Their keen cutting edges are ground to an angle that gets under the rivet heads, and the full force of the blow is exerted on the shear blades, cutting the rivets off cleanly and quickly.

Forged from a select ¾" octagon Chrome Vanadium Steel for rigidity and utmost strength to withstand the severe pounding to which they are subjected.

NO. 486, 10" long.

NET PRICE, each.....**$2.78**

NO. 487, 14" long.

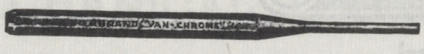
NET PRICE, each.....**$3.19**

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

"Van-Chrome" Punches

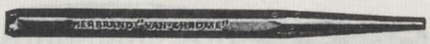
Forged from Chrome Alloy Steel, Nickel Plated

Constructed for strenuous driving, piercing and marking purposes, they will retain their points permanently. Herbrand "Van-Chrome" Punches are carefully forged from the toughest Chrome Alloy Steel and scientifically heat treated for the utmost possible endurance. Nickel plated triple in satin with points polished to a high lustre.



PIN PUNCHES

Cat. No.	Size Stock	Diameter of Point	Length	Net Price Eah
440	5/16	1/8	4 1/2	$ .60
441	5/16	5/32	4 1/2	.60
442	5/16	3/32	4 1/2	.60
443	5/16	5/32	6	.64
444	3/8	5/16	6 1/2	.71
445	3/8	7/32	6 7/8	.75
446	3/8	1/4	7	.83
447	1/2	5/16	7 1/2	.94



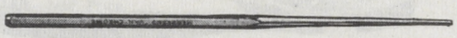
SOLID TAPER PUNCHES

450	5/16	1/16	4 1/2	$ .64
451	3/8	3/16	5	.71
452	1/2	1/4	6	.86
453	5/8	5/16	7	1.20



LONG TAPER PUNCHES

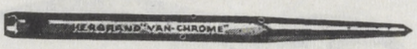
460	3/8	1/8	8	$ .86
461	1/2	5/32	9	1.16
462	5/8	1/4	11	1.58



LONG ALIGNING PUNCHES

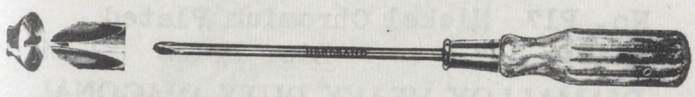
463	3/8	3/16	12	$1.69
464	1/2	7/32	14	1.91
465	5/8	1/4	16	2.21

SET NO. C-9, 1 each of above, in leatherette roll.....$6.49



CENTER PUNCHES

470	5/16	1/8	4 1/2	$ .56
471	3/8	7/32	5	.71



Wood Handle—Phillips Screw Drivers

For Four-point Recessed Heads—Self-centering

High Quality Hardwood Varnished Handles with Polished Chrome Alloy Steel Blades and Nickel-plated Ferrules

These Drivers cannot slip, break off screw heads onr cause damage to rich upholstery fabrics, fine beaded mouldings and highly finished accessories.

Specially designed for faster driving and better holding power, and to accurately fit the tapered four-point recesses in the heads of Phillips screws and bolts.

The bits center automatically in the screw heads. They will not slip, break screw heads or cause damage to upholstery fabrics or mouldings. An absolute necessity, because these new screws are on all popular cars.

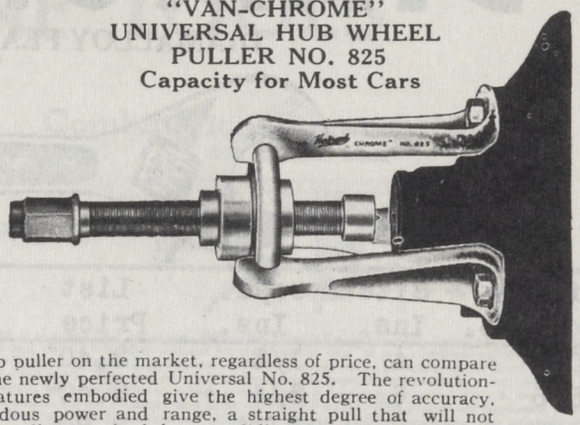
High quality hardwood handles and Chrome Alloy Steel blades.

Available in four individual sizes or in complete sets.

Cat. No.	Fits Phillips Screws	Length of Blade	Overall Length	Dealer Net Price
361	No. 4 and smaller	3	6 1/4	$ .86
362	Nos. 5 to 9, incl.	4	8 1/2	.90
363	Nos. 10 to 16, incl.	6	11	1.24
364	No. 18 and larger	8	14 1/2	1.54

"VAN-CHROME" UNIVERSAL HUB WHEEL PULLER NO. 825

Capacity for Most Cars

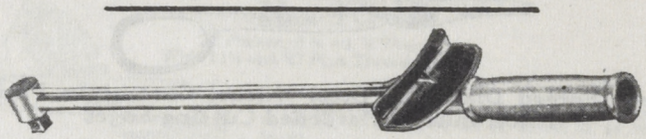


No hub puller on the market, regardless of price, can compare with the newly perfected Universal No. 825. The revolutionary features embodied give the highest degree of accuracy, tremendous power and range, a straight pull that will not bend or distort wheel lugs, a sliding bearing in which the driving screw rides, and a floating cap on the screw end. The sturdy alloy steel screw works in a sliding bearing, so that when it is necessary to bump the end of the screw it positively cannot injure the threads, as is often the case where the screw works in the solid hub of other type pullers. The fine threading of the screw gives it a powerful thrust and will stand tremendous punishment, because it is scientifically heat treated to exacting specifications. Another unique feature, not found on other pullers, is the floating cap on the screw end which centers on the axle and avoids injury to either axle or screw. These distinctive Herbrand features improve the tool so remarkably that it is immediately obvious to the mechanic that no injury can be transmitted to any of the inner parts of the wheel, axle or differential.

The simplest puller made yet covering the widest range of service without the use of any trick attachments. Complete in itself—requires no taking apart—nothing to assemble—and combines the best features of both puller and knock-off. The sliding arms are readily adjustable and quickly adapted to any hub, regardless of the number of wheel studs used and where the bolt circle does not exceed 7½". Thoroughly tested in laboratory and on all makes of cars, it exerts a direct and tremendous pull without resorting to pounding or hammering. Only Herbrand provides the Universal Hub Puller with sliding bearing and floating cap.

The toughest, most stubborn hub responds quickly to the persuasive power of the Universal Hub Puller.

NO. 825, 7½" expansion. Weight 9 lbs. 10 ozs.
NET PRICE, each.....**$21.18**



Torque Wrenches

Permanently Accurate **2 Dials**

½" Square Drive Capacity: 0 to 150 foot lbs.

To insure the peak performance built into motors by the manufacturers, all threaded parts should be uniformly tightened with a Torque Wrench. Best results in reconditioning work are obtained when a Herbrand Torque Wrench is used for the correct tightening of nuts and bolts on motor heads, manifolds, brake drums, clutch assemblies, differential housings, bearings, drive shaft pinions, connecting rods, axle nuts, body bolts, spark plugs, etc.

No moving parts or fragile mechanisms are used in the measuring element. The head is hydraulically fitted at a specified pressure to the beam; likewise, the handle and yoke assembly. The strong double dial plate is electrically welded to the yoke; the heavy spring steel pointer is also electrically welded in the head. These features mean long life and permanent built-in accuracy. Two dials permit reading of applied torque from any working angle. The chrome plated numbers on a black background are a big aid in reading in dark or close places. Dials are calibrated in five foot pound steps for right and left torques.

The small head and compact overall size make the S-55 the ideal Torque Wrench when working in hard-to-reach places. Light weight and perfect balance aid the operator.

The Herbrand Torque Wrench is made of high grade alloy steels and is heat treated and plated.

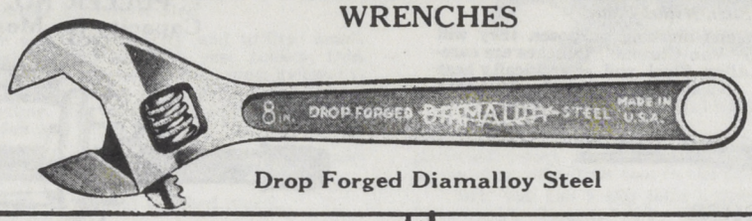
A torque chart giving the passenger car and truck manufacturers recommended torque values for clyinder heads, connecting rods, main bearings, etc., is packed with each Wrench.
Weight 2 lbs. Individually boxed.

NO. S-55. Length 19". DEALER NET EACH.....**$16.00**

No. S-65. The new S-65 has tapered beam construction, permanently accurate for precision tightening. Capacity 0-150 ft. lbs. Length 19½". DEALER NET.....**$21.65**

DIAMOND TOOLS

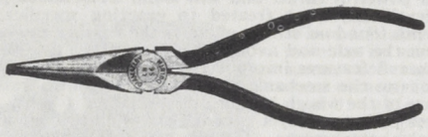
DIAMALLOY FEATHERWEIGHT ADJUSTABLE WRENCHES



Drop Forged Diamalloy Steel

Nickel Chrome No.	Size Ins.	Capa. Ins.	List Price
D74	4	1/2	2.40
D76	6	3/4	2.40
D78	8	15/16	2.80
D710	10	1 1/8	3.60
D712	12	1 5/16	5.29
D715	15	1 11/16	7.89
D718	18	2 1/16	13.16

DIAMALLOY LONG NOSE PLIERS

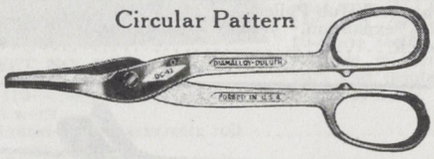


Drop Forged Diamalloy Steel—Gun Metal Finish Handles
Polished Head

No. LN56 Size: 6" List 2.80

DIAMALLOY METAL CUTTING SNIPS

Circular Pattern



Drop Forged Diamalloy Steel—Nickel Chromium Finish
Electronically Hardened Cutting Edges

No.	O'all lgth.	Cut lgth.	List
DC7	7"	1¾"	1.70
DC12	12¾"	3"	4.00

DIAMOND THIN STRAIGHT NOSE PLIERS



Drop Forged Tool Steel

No. N16 Nickel Chromium Plated
Size 6" List Price: 1.34

DIAMOND THIN BENT NOSE PLIERS



Drop Forged Tool Steel

No. M16 Nickel Chromium Plated
Size 6" List Price 1.86

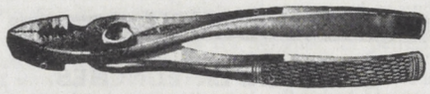
DIAMALLOY SLIP JOINT SIDE CUTTING PLIERS



Drop Forged Diamalloy Steel—Nickel Chromium Plated
Electronically Hardened Cutting Edges

No. PH17 Size 7" List Price 1.89

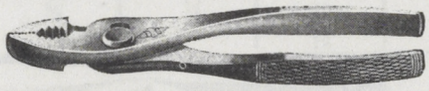
MOTOR SPECIAL COMBINATION PLIERS



Drop Forged Tool Steel

No. K16 Nickel Chromium Plated
Size: 6" List Price 1.26
No. K18 Nickel Chromium Plated
Size: 8" List Price 1.77
No. K110 Nickel Chromium Plated
Size: 10" List Price 2.32

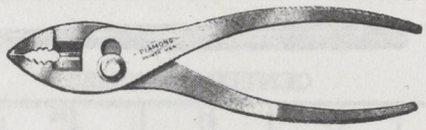
D. C. COMBINATION PLIERS



Drop Forged Tool Steel—Nickel Plated—Satin Finish

No. K36 Size 6" List .87

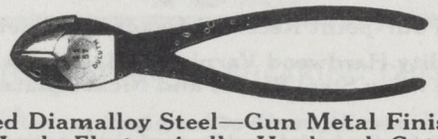
DIAMOND SLIP JOINT SIDE CUTTING PLIERS



Drop Forged Tool Steel
Electronically Hardened Cutting Edges

No. P17 Nickel Chromium Plated
Size: 7" List Price 1.89

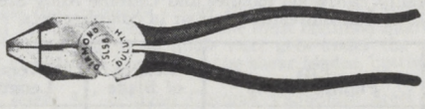
DIAMALLOY HEAVY DUTY DIAGONAL CUTTING PLIERS



Drop Forged Diamalloy Steel—Gun Metal Finish Handles
Polished Head—Electronically Hardened Cutting Edges

No. SS57 Size 7" List Price 3.43

DIAMALLOY LINEMEN'S SIDE CUTTING PLIERS



Drop Forged Diamalloy Steel—Gun Metal Finish Handles
Polished Head—Electronically Hardened Cutting Edges

No. SL56 Size 6" List Price 3.30

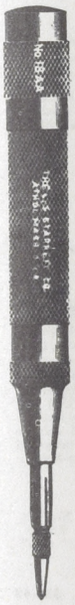
ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

STARRETT FINE TOOLS

FINE MECHANICAL TOOLS

FROM THE WORLD'S GREATEST TOOLMAKERS

Automatic Adjustable-Stroke Center Punch No. 18



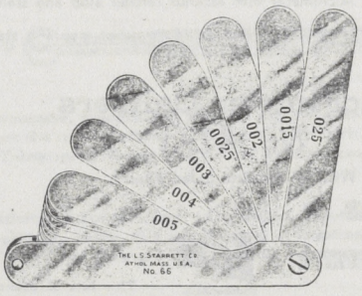
The ordinary hammer and center punch are not sufficiently accurate when laying out fine work. They require the use of both hands and the accuracy of the blow depends upon the skill of the mechanic.

This center punch contains a mechanism which automatically strikes a blow of any required force when the punch is in the exact position desired by the operator. It is provided with a knurled adjustable screw cap, which, working in connection with a spring, regulates the stroke. For work requiring a heavy mark, turn cap down; for work requiring a light mark, turn up. To use it, no hammer is needed. The punch being placed in an upright position over the working line, a downward pressure releases the striking block and makes the impression without danger of slipping, as is liable when a hammer is used. When adjusted for either light or heavy stroke, all indentations are of a uniform size for the starting of the drill, etc., and more accurate and quicker work may be done as required on delicate work in tool making. The working parts are hardened, durable and accessible for such repairs as may ever be needed. The adjustable cap fits the hand, with no stroke adjusting screw through and above it to bother. The point can be removed for regrinding and easily replaced. The AA size is 3¾ inches long when adjusted for medium stroke, ⅜ inch in diameter and weighs 1 ounce. The A size is 5 inches long when adjusted for a medium stroke, ½ inch in diameter and weighs 3 ounces. The B size is 6 inches long when adjusted for a medium stroke, ⅝ inch in diameter and weighs 4 ounces. It differs from the other sizes in being larger and capable of striking a much heavier blow.

No. 18A—Net Price **$4.97**
No. 18B—Net Price **5.81**

Thickness Gage No. 66

With .0015 and .0025 Leaves



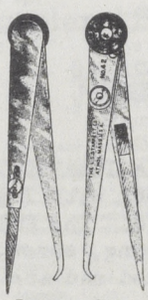
This gage has 26 leaves, ½ inch wide, 3 1/16 inches long, of the following thicknesses: .0015, .002, .0025, .003, .004, .005, .006, .007, .008, .009, .010, .011, .012, .013, .014, .015, .016, .017, .018, .019, .020, .021, .022, .023, .024, .025.

Overall length of gage when open, 6¾ inches.

No. 66—Net Price **$7.22**

Packed 1 in a box; 4 boxes in a carton.

Lock-Joint No. 42



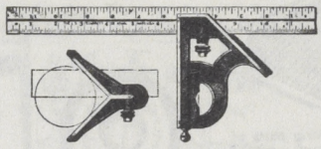
Reverse Front

With our adjustable point, lock-joint and sensitive adjustment. Reverse cut shows our adjustable point while the front cut shows our lock-joint and sensitive adjustment. The sensitive adjustment is obtained by the smaller knurled nut at lower end of arm.

6". Price **$2.97**

Combination Squares No. 11

With Hardened Blade



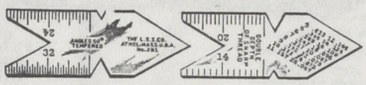
Every tool warranted accurate. With the adjustable blade this forms one of the most convenient and useful tools ever devised for mechanics' use. It is a complete substitute for a whole set of common try-squares, and is one of the best gages made for transferring exact measurements or laying out work. It is also convenient for a depth gage, or to square in a mortise. For a miter it is perfect, while with the auxiliary center head it forms a centering square, both inside and outside, which for convenience and accuracy has no equal. The blades are hardened and graduated in No. 4 and No. 7 graduations with heavy figures, reading both ways. See page 48, illustrating the use of the combination square.

6-inch, with center head. Net price, each	$ 6.45
6-inch, without center head. Net price, each	4.58
12-inch, blades. Net price, each	3.87
12-inch, with center head. Net price, each	9.48
12-inch, without center head. Net price, each	7.61
18-inch, with center head. Net price, each	11.61
18-inch, blades. Net price, each	7.16
24-inch, blades. Net price, each	9.29

The 6, 12, 18 and 24 inch stocks are fitted with levels as shown in the above cut. The 18 and 24 inch have the same stock and center head as the 12-inch. These squares are sent complete unless otherwise ordered.

The blades are graduated in No. 4 and No. 7 graduations. Those of No. 4 graduation being most used, will be sent unless otherwise ordered. Packed 1 in a box.

Center Gages



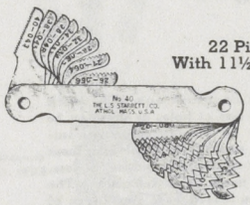
For use in grinding and setting screw cutting tools. Graduated in 14ths, 20ths, 24ths and 32nds of an inch, except Nos. 397 and 398, which are graduated in millimeters and ½ mm. These graduations are useful in finding the number of threads to the inch. Packed 6 in a box.

Price

No. 391—U.S. Standard, 60°, spring tempered. Net price **$1.03**

No. 40

22 Pitches, 9 to 40, V Thread
With 11½ and 27 Pipe Thread Pitches

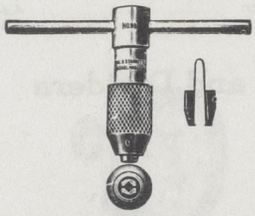


The gage has 22 pitches, viz.: 9, 10, 11, 11½, 12, 13, 14, 15, 16, 18, 20, 22, 24, 26, 27, 28, 30, 32, 34 36, 38, 40.

No. 40—Net Price **$2.84**

No. 93 T-Handle Tap Wrenches

For ordinary and inaccessible spot tapping and reaming. No more sturdy, positive holding wrenches than these.



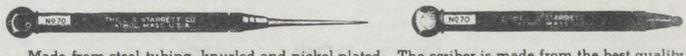
Useful for holding taps, drills, reamers and other small tools, and the body is centered for use against lathe centers, etc. Size C is made with a sliding handle. It will be found a very convenient all-round wrench in garages and motor service shops as its capacity permits holding the sizes of taps most commonly used.

The D, E and F listing are identical in capacity and construction to A, B and C except the body from knurled chuck nut to T-handle is proportionately longer. For machine, automobile and marine service and airplane repair shops eliminating the expense of having on hand an endless lot of special long taps to work at depths where space doesn't permit of turning the handle.

No.	NET PRICES 93A	93B	93C
Each	$2.21	$2.94	$5.15
Length, Inches	13¾	1-1/16	3-1/16
Cap, Inches Square	1/16 - 5/32	5/32 - ¼	3/16 - 5/16

Packed 1 in a box.

Pocket Scribers No. 70



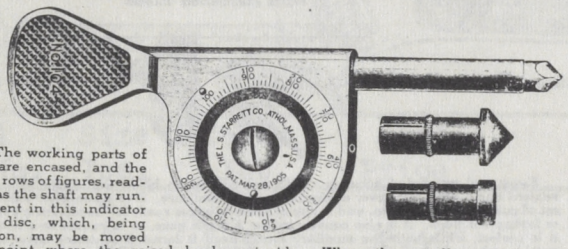
Made from steel tubing, knurled and nickel plated. The scriber is made from the best quality of steel, nicely tempered, and is held by a knurled chuck. The scriber is reversible, telescoping into the stock, and is held by a slight turn of the chuck so that it is always as safe to carry in the pocket as a penknife. The hexagon head prevents rolling off the bench.

Mechanics find this a convenient tool to have in their possession.

No. 70A—Handle, ¼ inch diam.; blade 2⅜ inch long; weight 1 oz. Price, each $ .90
No. 70B—Handle, ⅜ inch diam.; blade 2⅞ inch long; weight 1½ oz. Price, each .97

STARRETT FINE TOOLS

High Speed Indicator No. 104

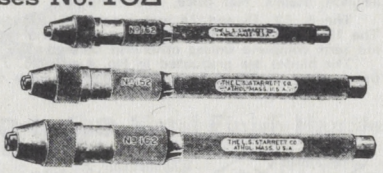


May be run at high speed without heating, and this on account of our frictionless bearing against which the inner end of the spindle revolves (a feature patented by us). The working parts of this instrument are encased, and the dial plate has two rows of figures, reading right or left, as the shaft may run.

An improvement in this indicator is the rotating disc, which, being carried by friction, may be moved to the starting point where the raised knobs coincide. When the spindle is placed in connection with the revolving shaft, pressing the raised knob with the thumb will prevent the disc from rotating, while the hand of the watch gets to the right position to take the time. By releasing the pressure the disc is liberated for counting the revolutions of the shaft when every 100 may be noted by feeling the knob pass under the thumb lightly pressed against it, thus relieving the eye which has only to look on the watch to note the time. This tool is nickel plated

No. 104—Net Price **$2.84**

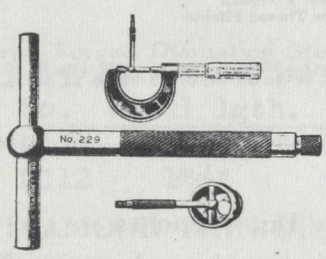
Pin Vises No. 162



These vises have hardened jaws with chucks so made that they will hold firmly anything inserted in them. The hole extends through full length of the knurled handle. The handle is reduced in size, so that it may be more rapidly rotated between thumb and finger when filing small work. They are convenient handles for holding scribers, small files, taps and extensions for holding small drills. Nickel plated.

No. 162A—Capacity, 0 to .040 inch. Price **$1.16**
No. 162B—Capacity, .030 inch to .062 inch. Price **1.16**
No. 162C—Capacity, .050 inch to .125 inch. Price **1.16**
No. 162D—Capacity, .115 inch to .187 inch. Price **1.42**

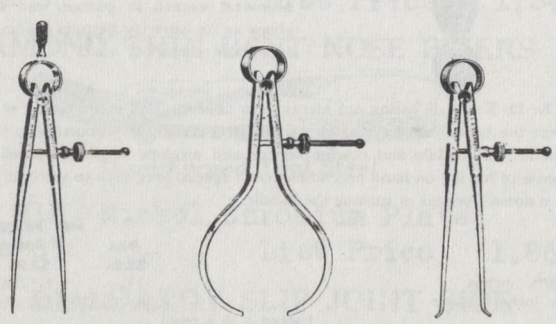
Telescoping Gages No. 229



These are instruments from which the exact size of holes or slots can be taken by an outside caliper or micrometer, so that shrink, close or loose fits, varying in thousandths, or less, can be made and measured. The plunger is locked by a slight turn of the knurled screw in the end of the handle. Made in five sizes. The smallest (size A) will enter a ½-inch hole — the largest (size E) will expand to 6 inches.

No. 229A—Range ½ inch to ¾ inch. Price, each **$3.55**
No. 229B—Range ¾ inch to 1¼ inches. Price, each **4.13**
No. 229C—Range 1¼ inches to 2⅛ inches. Price, each **4.64**
No. 229D—Range 2⅛ inches to 3½ inches. Price, each **5.81**

Toolmakers' Calipers and Dividers



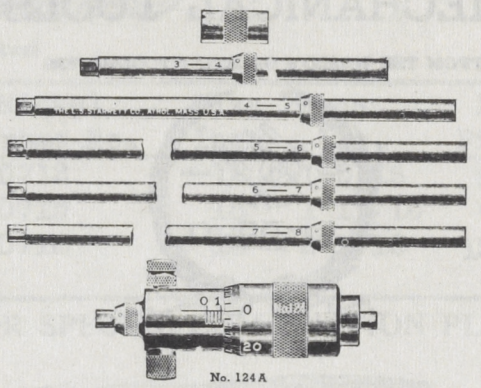
Dividers No. 277 — Outside Calipers No. 275 — Inside Calipers No. 274

Nos. 277, 275 and 274

Made with solid nut only.

2-inch. Price **$2.32**
3-inch. Price **2.97**
4-inch. Price **3.55**
6-inch. Price **4.17**

Inside Micrometer Calipers No. 124

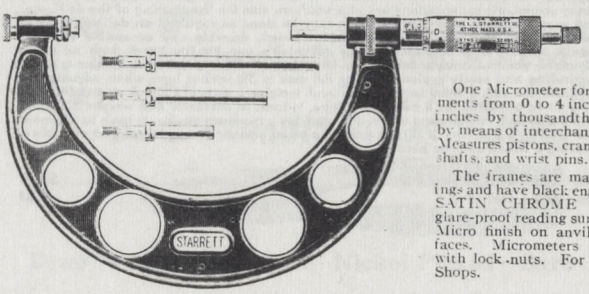


No. 124A

Set A has 6 rods and one ½-inch gage, and measures from 2 inches to 8 inches. Price **$16.45**

No. 224 Micrometer Calipers

Interchangeable Anvils Give Wide Capacity In Single Micrometer



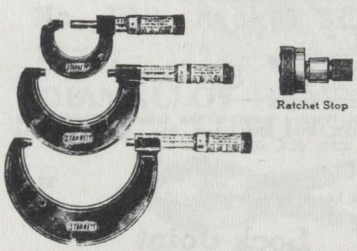
One Micrometer for all measurements from 0 to 4 inches or 2 to 6 inches by thousandths of an inch by means of interchangeable anvils. Measures pistons, crankshafts, camshafts, and wrist pins.

The frames are made from forgings and have black enameled finish, SATIN CHROME FINISH for glare-proof reading surfaces and Hi-Micro finish on anvil and spindle faces. Micrometers are provided with lock-nuts. For Auto-Service Shops.

PRICES	No. 224 Range 0" to 4"	No. 224 Range 2" to 6"
No. 224A—2" to 6" Micrometer with locknut ratchet stop and standards. Net price, each	**$51.92**	
No. 224AA—0" to 4" Micrometer with locknut ratchet stop and standards. Net price, each	**42.89**	

Micrometer Calipers No. 436

With Black Enameled Frame



Ratchet Stop

This line of micrometers will be found most popular with the mechanics, especially to those who are engaged in inspection work.

We also recommend this type micrometer for vocational training students and apprentices.

Size Inches	Size mm.	Range Inches	Range mm.	Net Price Each with Locknut and Ratchet Stop
1	25	0-1	0- 25	**$14.51**
2	50	1-2	25- 50	**16.13**
3	75	2-3	50- 75	**17.42**
4	100	3-4	75-100	**19.03**
5	125	4-5	100-125	**20.96**
6	150	5-6	125-150	**22.25**

The Cuts on this page represent a line of Calipers and Dividers made from round stock with legs drawn down, making them tough and rigid. The fulcrum stud is hardened, bows extra strong, screw and nut nicely fitted, all highly finished and are the best tools in their line.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

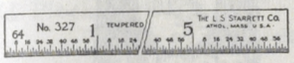
STARRETT FINE TOOLS

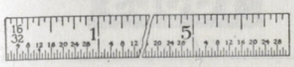
Flexible Steel Rules

No. 327

Machine Divided—
Distinctive Graduations

With Simplified Quick Reading

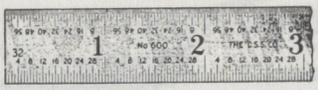




An improved flexible steel rule—graduated in 16ths, 32nds and 64ths, and on both sides of the rule, from one end. No turning end for end nor measuring with figures upside down. Graduations that are used mostly, 32nds and 64ths, are on the lower edges, with quick reading features. The 16ths, regular graduation, is on the upper edge of the 32nds side. Made from finest quality spring-tempered steel. This thin rule being graduated on both sides, **caution** is recommended against bending too sharply.

No. 327—6-inch only. Price, each **$1.94**

No. 600



Special attention is called to the fact that these rules are figured so as to assist the user to quickly read the 64ths and 32nds, as shown by the cut.

Showing No. 603 Reverse Side with End Graduations

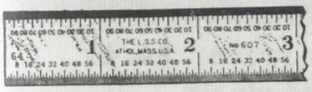


No. 603 has No. 4 graduation, with the 64ths and 32nds figured, like No. 600, and is graduated in 32nds of an inch on both ends of one side, as shown by the cut. Made in 2-inch to 12-inch lengths, inclusive.

Length, inches	6"	12"
Price, each	**$2.30**	**$3.96**

Spring-Tempered Steel Rules No. 607

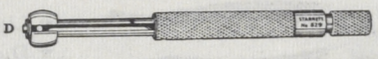
Machine Divided—Distinctive Graduations—Quick Reading



No. 607 has No. 7 graduation, which consists of 16ths and 32nds on one side, and 64ths and 100ths on the other. Special attention is called to the fact that these rules are figured so as to assist the user to quickly read the 32nds, 64ths and 100ths, as shown by cut. No. 607 made only in 4, 6, 12, 18 and 24 inch lengths.

Length, inches	6
Price, each	$ .90

Small Hole Gages No. 829

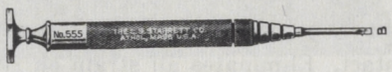


At last, an inexpensive, practical set of small gages that reach into small holes and recesses, and get the measurement from ⅛ inch to ½ inch. A real companion set to our No. 229 Telescoping Gages which have a minimum capacity of ½ inch. (See page 141.)

Balance, sensitivity of contact and adjustment, together with ball radius, hardness and amplitude, make this set of gages of inestimable value. Simply expand to get the "feel" and measure ball end with a micrometer.

No. 829A—Range ⅛ inch to 2/10 inch. Price, each $3.48
No. 829B—Range 2/10 inch to 3/10 inch. Price, each 3.61
No. 829C—Range 3/10 inch to 4/10 inch. Price, each 3.74
No. 829D—Range 4/10 inch to ½ inch. Price, each 3.87

Jewelers' Screw Drivers No. 555



They are nicely and substantially made from steel tubing, knurled and nickel plated. Six constitute a set, with blades varying from .025 to .100 inch in width. The blades are held from turning in the handle by a solid lock, and from coming out by a slight turn of a neat chuck. The top is finished with a swivel knob, concaved to fit the finger and hexagonal in shape to prevent rolling off the bench. To designate the size at a glance, the chuck end is marked with various grooves, five grooves indicating the finest size AA, four grooves size A, three grooves size B, two grooves size C, one groove size D; the largest size, E, being plain.

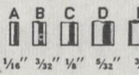
No. 555AA—Handle, ¼-inch diameter; approx. width of blade, .025 inch. Price ..... $ .88
No. 555A —Handle, ¼-inch diameter; approx. width of blade, 0.40 inch. Price ..... .88
No. 555B —Handle, ¼-inch diameter; approx. width of blade, .055 inch. Price ..... .88
No. 555C —Handle, ¼-inch diameter; approx. width of blade, .070 inch. Price ..... .88
No. 555D —Handle, ¼-inch diameter; approx. width of blade, .080 inch. Price ..... .88

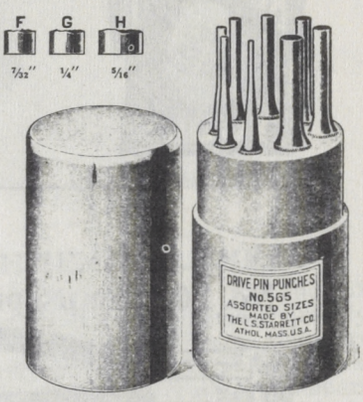
Drive Pin Punches No. 565

Made of good quality steel, neatly shaped, hardened and polished, with knurled centers.

Length of each size, 4 inches. Diameter of points: A, 1/16 inch; B, 3/32 inch; C, ⅛ inch; D, 5/32 inch; E, 3/16 inch; F, 7/32 inch; G, ¼ inch; and H, 5/16 inch.

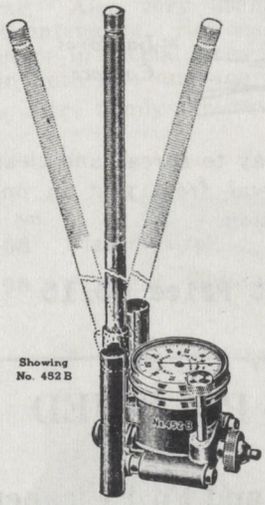






Price, each ..... $ .44

Cylinder Gages No. 452

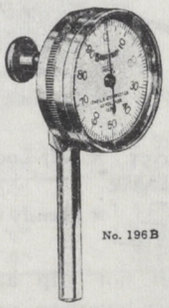


Showing No. 452B

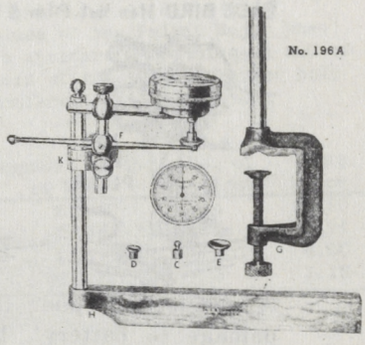
Mechanics in motor service, re-grind and re-bore shops pronounce this the ideal gage for determining tapered, out-of-round or scored cylinders. No more difficulty in convincing a car owner the necessity of truing up cylinders. Use the gage before him; it shows him instantly the condition of the cylinders to a one thousandth part of an inch. After the variation of the bore has been determined, note the reading on the dial and transfer to an outside micrometer to find the diameter This gage is of rugged construction and has a non-breakable crystal over the dial. The dial is mounted on a block which moves at right angles to the sled. The sled has two-line contact points which are at all times in alignment with the walls of the cylinder. Two contact points (hardened) which independently cause the hand to travel over the dial reading in .001 and with a unique double spring action make the gage self-centering and absolutely non-collapsible. Provisions for diameters varying from 1⅞ inches to 6 inches are made by the use of adjustable rods. These may be carried in the hollow handle of the gage. The dial is graduated to show plus or minus, one turn of the hand being .100. By turning the knurled rim the dial may be instantly moved to bring the 0 mark to any point desired in relation to the hand. Nickel plated.

No. 452A—With rigid handle. Capacity 2½ inches to 6 inches. Price $15.00
No. **452E**—Price 27.09

Universal Dial Test Indicator No. 196



No. 196B



Simple, reliable, easily read and very sensitive, it may be adjusted to any angle. The slightest pressure upon contact point produces a movement of the hand on the dial. Circumference of the dial divided into 100 equal spaces, each representing a movement of the contact point of one-thousandths of an inch. One revolution of the hand therefore indicates one-tenth of an inch, the capacity of the instrument being approximately two-tenths.

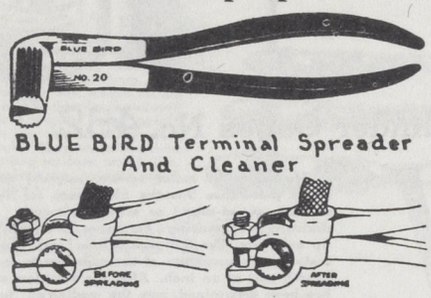
With the contact points D and E any exterior surface may be tested as in cutters, racks, etc., whereas the contact point C with its smaller radius and diameter should be used only on plain surfaces. By bringing the contact point against the work with just enough pressure to give the hand one full turn, then setting it at 0, an opportunity is given for one full revolution of the hand to both right and left at 0, showing a rise or drop in the work and the amount of variation. A most valuable feature is the adjustable dial. By turning the knurled rim the dial may be instantly moved to bring the 0 mark to any point desired in relation to the hand. Each indicator is fitted with three hardened contact points for different classes of work. The special tool-post holder and sleeve are useful in lathe work. For general work the indicator with sleeve K is adapted for use with our 9-inch or 12-inch surface gages. The clamp G permits attaching the indicator to large lathe and planer tools, milling arbors, etc. The attachment F more than doubles the value of the indicator, adapting it for use inside of holes, to reach over blockings on face plates, etc.

No. 196A—Indicator, with all attachments, as shown. Price $23.87
No. 196B—Indicator only, with 3 contact points, C, D and E. Price 15.80

BLUE BIRD
BATTERY SERVICE TOOLS

DROP FORGED FROM CHROME ALLOY STEEL - HEAT TREATED -

No. 20 Clamp Spreader and Cleaner



BLUE BIRD Terminal Spreader And Cleaner

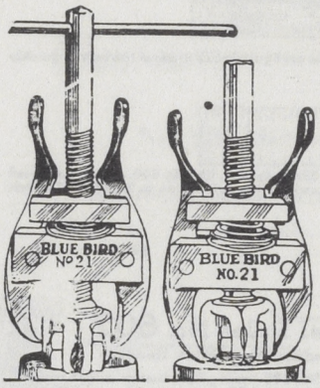
★ *Spreads and Cleans in One Operation*

★ *Improves Contact*

A quick, easy and efficient way to spread and clean terminal clamps after removal from post in one operation and without distortion.

7½" Long List Price $3.15

No. 21 Universal Clamp Lifter



★ *Positive, Double Cam Action*

★ *Simple in Operation*

A super-powerful tool designed and guaranteed to remove the most badly corroded clamp of any style, shape or form. Grips below clamp if there is room; otherwise the sharp points of the jaws engage the sides of the clamp with a vise-like grip.

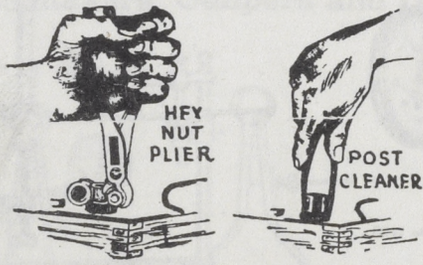
List Price $4.40

HIGHLY HAND-POLISHED BLUE BIRD BATTERY PLIERS

No. 11 Hex Nut Plier and Post Cleaner



No. 11
BLUE BIRD Hex. Nut Plier & Post Cleaner



★ *End Clearance Eliminates Cell Cover Breakage*

★ *Eliminates All Strain on Rivet*

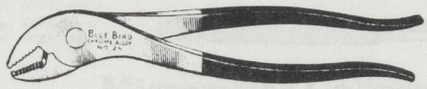
★ *Self-Locking*

★ *Handy Cleaner*

A self-locking plier that will not slip and cause damage to battery! Its super-leverage overcomes the most stubborn nut. Also serves as a general purpose nut wrench especially adaptable for brake nut adjusting. Attached post cleaner insures perfect contact and stops energy loss.

7½" Long List Price $2.45

No. 25 Angle-Nose Battery Plier



★ *Light*

★ *Durable*

Designed for positive grip on terminal nuts. Streamlined, very thin nose. Greater surface contact insures better grip and more leverage.

List Price $2.07

No. 52 Super-Grip Battery Plier



★ *Maintains Own Grip*

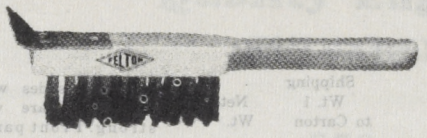
Designed to maintain its own grip after engaging hex, square or round parts. Light pressure holds jaws in contact. Eliminates all strain on rivet.

List Price $2.07

Each Tool Individually Packed in Attractive Telescope Box

ALL ORDERS RECEIVE CAREFUL ATTENTION.

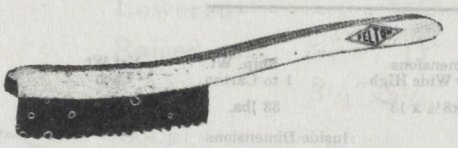
WIRE WHEELS



Straight Handle Scraper Attached

Solid Block 11⅜" x 1½". Length of Brush Part 5½". Width of Scraper Blade Edge 2⅞".

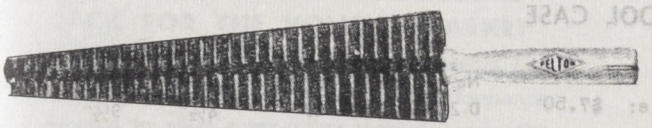
No.	Rows	Trim	List
SB702	5 x 13	1½"	.92



Curved Handle

Solid Block. Length of Brush Part 6". Length Overall 13⅛"

No.	Rows	Width of Block	Trim	List
188	4 x 19	1⅛"	1⅛"	.56



Single Spoke Brush

Pure Black Horse Hair. FULL Tapered style.

No.		Dia. Brush Part	Length Overall	List
8C	Curved Brush Part 2¼" tapered to 1"		15"	$1.00



Gasoline Brush

No. T-401

FOR DEGREASING Automotive Parts. Overall Length 12½". Grey Tampico Fibre. List Price .39

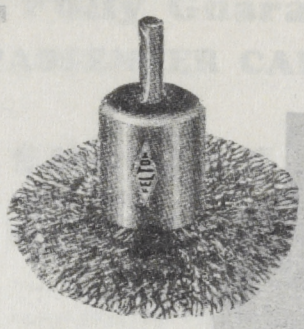


FLOOR SWEEPING BRUSHES

Selected Palmyra Fibre

Natural lacquer finished Block. Two tapered handle holes. Staple Set. Shellac finish handle. Lengths 14" to 30". Trim of fibre is 4".

SB652 x 18" List Price $2.53





FLARED TYPE STRAIGHT TYPE

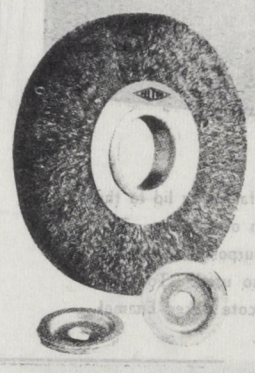
END ATTACHMENT BRUSHES

For use with Portable tools. Numbers 68 and 69 Flared or Circular attachment brushes will remove quickly and easily the hardest carbon deposits from cylinders and piston heads. Also for removing rust, paint, burrs, etc. from any part of the motor or car body. Numbers 96, 97, 98 and 99 end brushes are designed particularly for cleaning valve seats, recesses, combustion chambers, etc. Also very useful when used in Aircraft engine maintenance. Besides sizes listed below End Brushes are made in special sizes to order such as ¼", ½", etc. and in both fine and coarse grades of wire.

Wire firmly secured in a cup with a ¼" shank.

No.		Dia. Brush Part	
68	Flared Type	1½"	List Price $2.20
98	Straight Type	¾"	List Price $1.80

MAJOR WIRE WHEEL BRUSHES



The assembly of steel wire sections is locked into the hub under tremendous pressure making a sturdy, dependable unit wire brush. The selected grade of steel used in the wire ... the special crimping of the wire to reduce breakage...plus just the right density of brush...all contribute to long effective service.

All sizes of the Felton Major Wheel have a standard 2" opening--a set of adapters of the required arbor hole is furnished with each wheel.

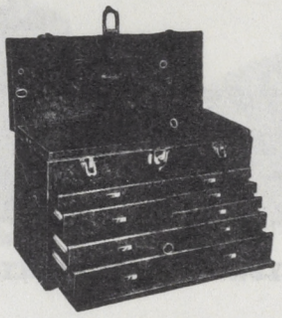
No.	Diam.	Approx. Thick. Thru Arbor	Approx. Width of Face	No. of Sections	List Price
152	10"	1 1/4"	2 1/2"	4	11.60
153	8"	1 1/8"	1 3/8"	3	5.71
154	6"	1 1/8"	1 1/4"	3	4.80
157	4"	7/8"	1 1/8"	3	3.15

VALVE GUIDE BRUSHES

No.	Diameter	List Price
T-617	1/4"	1.92
T-516	5/16"	1.92
T-619	11/32"	1.92
T-517	3/8"	1.92
T-518	13/32"	1.92
T-519	7/16"	1.92

TOOL BOXES

MACHINISTS' CASES



No.	Dimensions Long Wide High	Shipping Wt. 1 to Carton	Net Wt.
520	20x8½x13"	35 lbs.	27¾ lbs.

Net Price: $24.40

Drawer slides work easily and are very strong. Front panel, which slides under drawers when box is open, fits against drawers, locking them with lid lock. Rust resisting fittings, felt-lined drawers. Seal brown ripple baked enamel finish. Adjustable partition in each drawer except bottom one.

Inside Dimensions

	520
Till in Top	20 x8⅜x3¾"
Four Drawers	8⅝x7½x1"
One Drawer	18¼x7½x1½"
One Drawer	8⅝x7½x2"
One Drawer	18¼x7½x2½"



No.	Dimensions Long Wide High	Ship. Wt. 1 to Carton	Net Wt. Each
620	20 x8½ x 13"	33 lbs.	26 lbs.

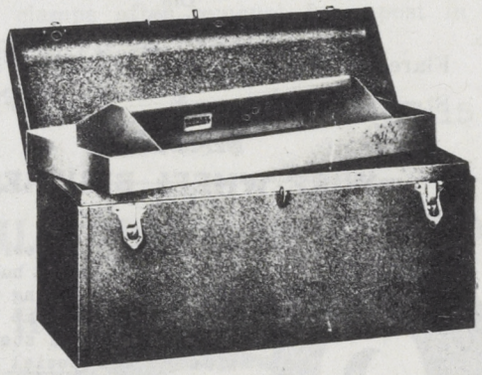
Net Price: $20.00

Inside Dimensions

	Long	Wide	Deep
Till in Top	20	x 8⅜	x 3¼"
Top Drawer (divided in two sections)	18¼	x 7½	x 1⅛"
Middle Drawer	18¼	x 7½	x 2⅜"
Lowest Drawer	18¼	x 7½	x 3¼"

Drawers slide easily on super-compound slides that stop only after they are extended, giving a clear view of the contents. Front panel, which slides under drawers when box is open, fits against drawers locking them with lid lock. Rust resisting fittings; dark green ripple baked enamel finish; soft felt-like finish inside of drawers.

NO. D-20 TOOL CASE

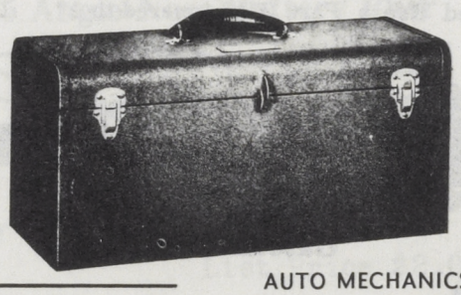


Net Price: $7.50

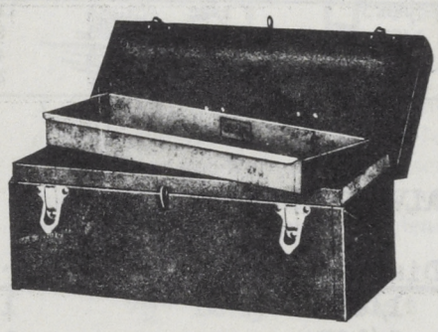
No.	Length	Width	Height
D-20 Box	20 "	8½"	9½"
Tote Tray	19⅜"	7⅞"	1¾"

A convenient, well designed, all purpose tool box for home or shop use. The tray is divided into three compartments for tools or small parts. The large compartment is 13⅞"x7⅞"; the end compartments are 2¾"x7⅞".

A piano type hinge is used for fastening lid to the box and extends the full length of the box. Two staples are affixed for the purpose of using a padlock. Two catches are also used. Tool box is finished in Olive Green Webcote Baked Enamel. Each box is packed individually.



NO. D-16 and NO. D-19



DIMENSIONS

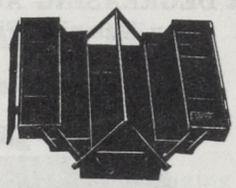
No.	Length	Width	Height	Net
D-16	16"	7"	7"	$4.45
D-19	19"	7"	7"	$5.00

These boxes are particularly popular with the ladies employed in industrial plants but are equally handy in the home.



Boxes are equipped with catches and staples for the purpose of using a padlock. The No. D-16 case is packed 4 boxes to a carton. The No. D-19 is packed individually. These cases are finished in our Olive Green Webcote Baked Enamel.

AUTO MECHANICS' TOOL BOX



Opens by a slight pressure on the handle.

THE CHOICE OF EVERY AUTO MECHANIC



Closes by lifting lightly on handle.

Patent No. 1675484

Net Price: $11.95

No.	Size in.	Weight ea.
121	21x8x7¾	20 lbs.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

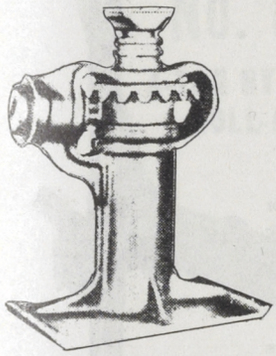
PASSENGER CAR JACKS

Quality Engineered — Fully Guaranteed

SUITABLE FOR ALL PASSENGER CARS

970

LIGHT PASSENGER CAR JACK



Capacity	2000 lbs.
Lowered	5⅞"
Raised	13"
Base	3¼"x5¼"

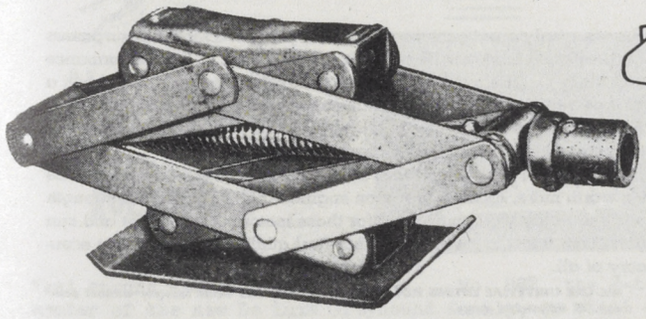
* DOUBLE SCREW ACTION
* MALLEABLE IRON CASTINGS
* HIGH QUALITY STEEL
* LONG FOLDING HANDLE

List Price: $5.00

A POPULARLY PRICED SCISSORS JACK FOR THE VOLUME MARKET

Here is an entirely new unbranded Scissors Jack combining low cost with high quality performance. Designed to meet competitive market needs, this jack will be a fast-moving popular model among volume buyers, used car dealers and car owners wanting a low priced, dependable under-axle jack.

No. 1002 SCISSORS JACK



List Price: $7.95

SPECIFICATIONS

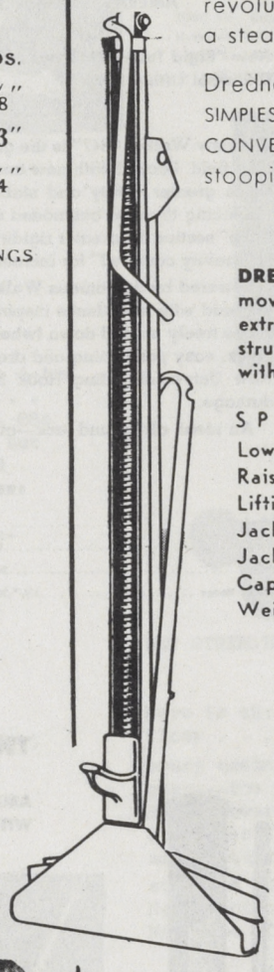
Capacity	1¼ Tons
Closed Height	5"
Power Raise	9¼"
Full Height	14¼"
Base Size	3½" x 7"
Handle Length	49½"
Weight	12 lbs.
Standard Case	8

safe! simple!

the Newest Development in Bumper Jacks

The NEW Drednaut **Twin-Leg** Bumper Jack features a revolutionary "double-support" construction to assure a steady, sturdy foundation.

Drednaut **Twin-Leg** is the SAFEST bumper jack built, the SIMPLEST to operate, the FASTEST to assemble, the most CONVENIENT and easiest to handle. There's no awkward stooping or bending necessary, because the practical



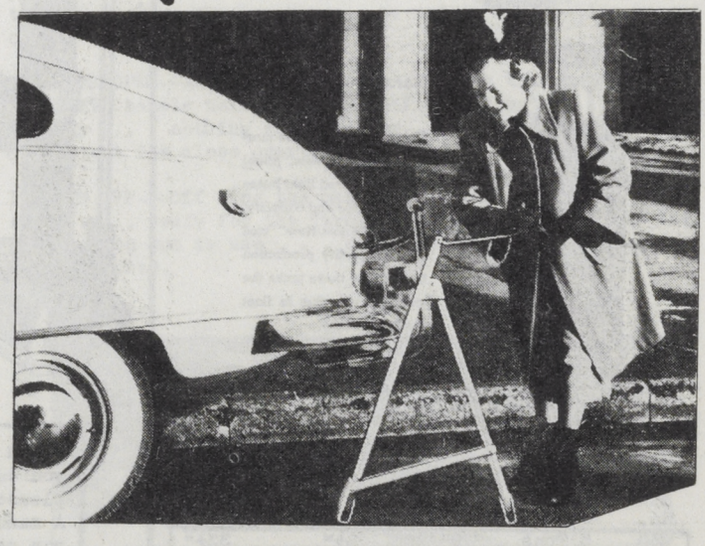
DREDNAUT TWIN-LEG BUMPER JACK has only a few moving parts, a finish which resists rust and corrosion, an extra-high lifting range. The entire jack is sturdily constructed, and features a strong cross-support bar equipped with a Safety-Lock.

SPECIFICATIONS

Low height	6½"
Raised height	31"
Lifting range	24½"
Jack dimensions (open)	10"x22"x36½"
Jack dimensions (closed)	6"x10"x36½"
Capacity	2000 lbs.
Weight	19¾ lbs.

1. **EXTRA-LOW LOAD REST**
   for late model low-slung cars
2. **EASY TO OPERATE**
   no need to bend or stoop
3. **SAFE LIFTING ACTION**
   no springs, no dogs, no reverse levers
4. **FOLDS UP...EASY TO CARRY**
   fits any trunk compartment

List Price: $11.95



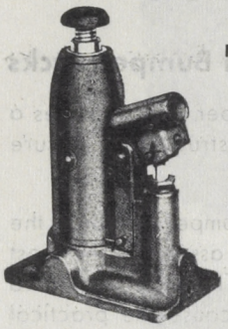
D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

WALKER JACKS

THE NEW WALKER "DE LUXE"
SERIES "900"
PORTABLE HYDRAULIC JACKS
1½ to 8 Tons.

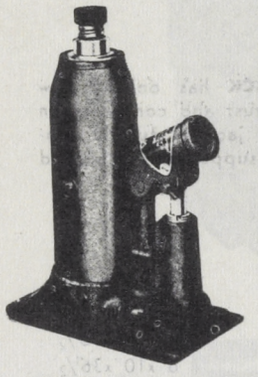
FOR PASSENGER CARS AND LIGHT TRUCKS



No. 906—1½ TONS

All the operating features and lifting ease for which the new DeLuxe Walker "900's" are famous, make this fine passenger car jack the favorite among those who prefer the conventional hydraulic jack. Ample capacity and range to handle popular cars.

With Handle
Net Price: 11.70



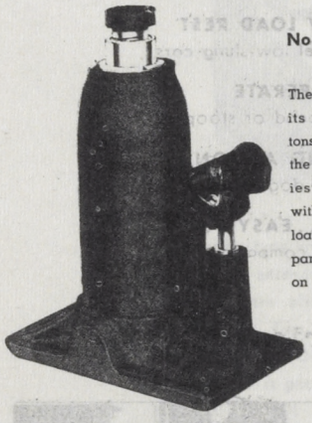
No. 925—3 TONS

Here is smooth hydraulic lifting power in the medium range of service. These dependable tool box jacks have the combination of easy operation, rugged construction and simplicity of maintenance demanded for commercial and fleet service.

With Handle
Net Price: 19.80

No.	Capa.	Height	Raise	Handle
906	1½ Tons	7"	5 1/8"	31"
925	3 Tons	8½"	6"	33½"

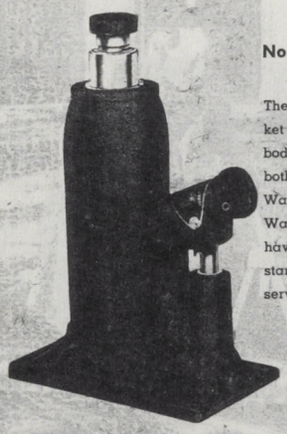
FOR MEDIUM TRUCKS AND BUSES



No. 935—8 TONS

The rugged No. 935 with its rated capacity of 8 tons will handle all but the very largest and heaviest trucks and buses without removing the payload. Major trucking companies have standardized on this dependable jack.

With Handle
Net Price: 23.35



No. 930—5 TONS

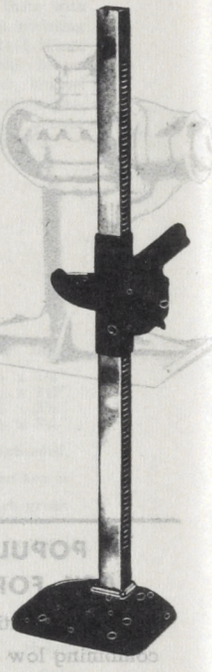
These jacks cover the market for light fleets, panel body trucks and light buses both in range and capacity. Walker "Know-How" and Walker quality production have made these jacks the standard of value in fleet service.

With Handle
Net Price: 26.15

No.	Capa.	Height	Raise	Handle
930	5 Tons	9"	6¼"	33½"
935	8 Tons	9"	6¼"	33½"

An Outstanding Selection of Fine Passenger Car Jacks For Every Requirement . . . For Any Make or Model Car

THE NEW DELUXE WALKER "647"



AMERICA'S FINEST MECHANICAL BUMPER JACK

New "Rigid Tube" Rack Bar . . . "Gravity Centered" Base . . . Universal Lifting Hook

The new Walker "647" is the greatest "buy" in the mechanical bumper jack field. Packed with new and advanced engineering features it combines greater safety and stability with a proven mechanical action. Replacing the now out-moded solid rack bar is the new Walker "Rigid Tube" section for greater rigidity and lightness. The large 48 sq. in. base is "gravity centered" for increased safety and stability.

Powered by the famous Walker mechanical unit, it raises and lowers the load with confidence inspiring positive "clicks." Lifting mechanism slides freely up and down (when control lever is in "down" position) for quick, easy positioning and drops automatically when free of the load. New Universal Lifting Hook handles all cars securely and without damage.

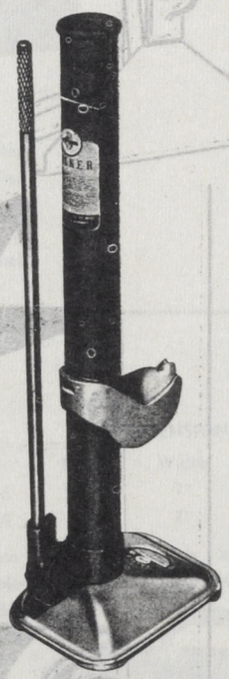
An ideal, all-around jack—at an economical price.

SPECIFICATIONS

Number	647	Upright	1⅛" x 1½"
Capacity	1 ton	Base Size	6" x 8"
Height	34½"	Handle	20"
Lifting Range	5½"-30⅞"	Weight	11¾ lbs.

Net Price: $8.35

THE NEW WALKER "903"



AMERICA'S FINEST HYDRAULIC BUMPER JACK WITH NEW 180° OPERATING RADIUS

Here is a truly great, new passenger car jack . . . a jack that surpasses all previous standards of strength . . . of safety . . . of performance and utility . . . the new Walker "903." Never before has there been a jack so versatile . . . a jack so handsome and yet beneath its streamlined, eye-catching beauty is all the stamina . . . the ruggedness . . . the smoothness that makes a champion.

Yes, it does cost more than "mine run" hydraulic jacks, because it's worth more. Its finer precision engineering . . . its greater strength and reliability were conceived for those motorists who want and can afford the finest . . . who know that real quality is the greatest economy of all.

ALL-CAR UNIVERSAL LIFTING HOOK fits any bumper and holds securely without damage. 7" adjustable range.

EXTRA "TOP COLUMN" LIFTING POSITION—for high lifting points, flat column top will handle full capacity load.

EXTRA-STRONG LIFTING COLUMN—provides exceptional stability. Exclusive design protects against off-center loads and weaving.

LARGE "GRAVITY CENTERED" BASE—double usual base area with load "gravity centered" for stability and safety. Base removable.

PRECISION-BUILT HYDRAULIC POWER UNIT—pump completely protected. No exposed parts. Positive release control.

180° OPERATING RADIUS—Simply by rotating the pump when positioning the "903" can be operated from any position within 180°. This exclusive feature permits user to work safely and easily regardless of the closeness of the car in front or behind.

SPECIFICATIONS

Capacity	1½ tons	Hook Adjustment	7"
Closed Height	25¾"	Base	6" x 8"
Power Raise	18"	Base Surface Area	48 sq. in.
Low Starting Height-on-hook	5½"	Handle Length	22"
Weight	23 lbs.		

Net Price: $20.25

There is no doubt about it, the "WALKER JACK" is the best you can buy. If we did not list the Jack that you require please write and we will do our best to meet your demands. A manufacturer's catalogue will help you select the Jack you need, so do not hestitate to ask for one.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

WALKER JACKS

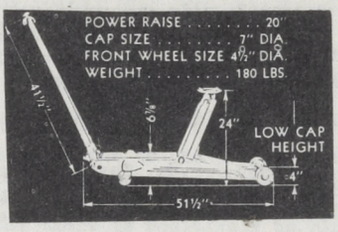
THE NEW DELUXE *Greyhounds*



NET PRICE:
$205.75

No. 884

4-TON HYDRAULIC ROLL-A-CAR



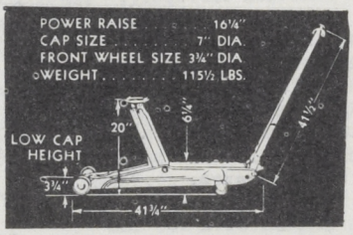
Here is the pride of any shop . . . the new De Luxe 4-ton Walker Greyhound with the "GOLD SEAL" power unit . . . built for punishment . . . designed for power. No. 884 will comfortably handle all passenger cars and all but the heaviest trucks and tractors. Starts at 4" and raises to a height of 24". Ample chassis length for inter-shop moving. Long handle with "pistol grip" control operates in three positions for greater convenience. Dual control knob has "keyless" safety lock to prevent accidental lowering. It's low, sleek chassis "ducks" under long, low overhangs, and low-slung axles. Rugged malleable side plates and bell crank with free turning heat-treated and drop-forged cap. It has speed, ease of handling and ample raise to provide plenty of working space for any undercar job.



NET PRICE:
$148.25

No. 882

2-TON HYDRAULIC ROLL-A-CAR



Fast strong and easy to handle . . . No. 882, the 2-ton member of the new De Luxe Greyhound family, is still a full sized ROLL-A-CAR. It has ample chassis length for dollying. With it's rugged malleable side plates and bell crank, topped with a high carbon drop-forged steel cap. No. 882 handles all but the heaviest cars with unfailing safety and ease. It's power raise starts at $3\frac{3}{4}$" and raises to a full 20" . . . plenty of room for all kinds of work. Complete control of the load at either of two handle positions, the new De Luxe No. 882 has all of the outstanding performance features of the 4-ton model and other advanced refinements not ordinarily found in popular jacks.

No. 780

10-TON HYDRAULIC ROLL-A-CAR

For further information on this jack, which is capable of handling the heaviest trucks and tractors, please write for a Manufacturer's catalogue.

NET PRICE: $313.00

THE NEW DELUXE *Whippet*

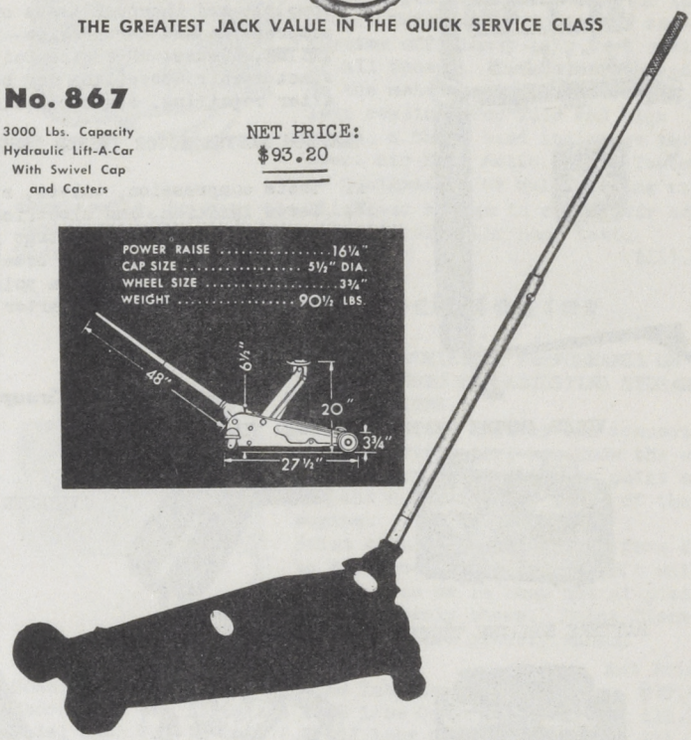
WITH THE NEW "BLUE SEAL" POWER UNIT

THE GREATEST JACK VALUE IN THE QUICK SERVICE CLASS

No. 867

3000 Lbs. Capacity Hydraulic Lift-A-Car With Swivel Cap and Casters

NET PRICE:
$93.20



NEW STRENGTH . . . . NEW SMOOTHNESS . . . .
NEW EASE OF CONTROL AND OPERATION . . . . . .

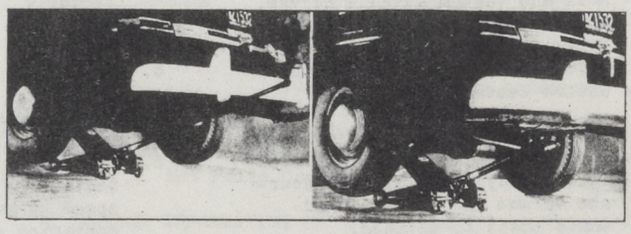
Here is the ideal quick service jack for driveway . . . service floor . . . or road service. Here is the PERSONAL jack for every mechanic---the greatest jack value in the quick-service class--the new De Luxe Walker "WHIPPET" with the new "BLUE SEAL" power unit.
Never has a finer combination of performance and value been manufactured. . .for Walker engineering has built new strength into it's "RIGIDIZED" Dreadnaught Steel Chassis New smoothness and life into it's "BLUE SEAL" power unit. New ease of operation into it's control.

THE JACK WITH THE "HANDY HANDLE"

IT CONTROLS---New "finger-tip" control assures safe, smooth, positive control of lowering from any point on the long full turning handle. No gears . . . no rods . . . nothing to get out of order.

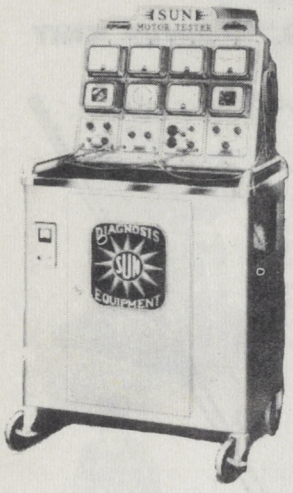
IT TELESCOPES---With a simple press of the thumb, the "WHIPPET" handle telescopes to half it's length . . . out of the way . . . nothing to trip over . . . or drive over. Converient for close quarters.

IT ZIPS OFF---Off zips the handle by a turn of the thumb screw . . . ready for the "trouble car" . . . Up stands the handle when not in use . . . out of the way . . . occupying minimum space.



Scientific Automotive Service Equipment

sun master motor tester



ACCURATELY TESTS COMPRESSION, IGNITION, ELECTRICAL SYSTEMS AND CARBURETION OF ALL TYPES OF AUTOMOTIVE ENGINES.

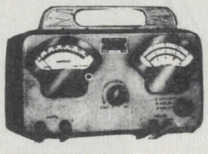
Complete and thorough tests of the three major divisions of automotive engines, ignition, compression and carburetion---are scientifically and precisely made with the SUN MASTER MOTOR TESTER. Causes of engine failure or poor performance are quickly determined so that the exact repair operations may be effected without lost time or guess work. Re-testing, after repairing, assures maximum performance and efficiency.

THE SUN MASTER MOTOR TESTER TESTS ALL THESE AND MANY MORE

1. Tests compression, valves, rings, gaskets.
2. Tests ignition, and electrical circuits, battery, generator, voltage regulator, current regulator, circuit breaker, coil, condenser, R.P.M., ignition points, ignition wiring, starters and starter wiring.
3. Tests carburetor and fuel system, fuel pumps, booster pumps, mixture, carburetor adjustments, valve guides, manifold gaskets, air cleaner.
4. Tests all electrical wiring and circuits.
5. Tests hydramatic transmission adjustments.

Sun Master Accessory Group *Included* with Every Sun Master Motor Tester

VOLTS AMPERE TESTER



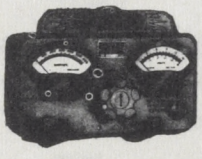
POWER TIMING LIGHT



CYLINDER BALANCE TESTER



BATTERY STARTER TESTER



COMPRESSION TESTER



IMPORTANT

WE EMPLOY A "SPECIALIST" IN MOTOR TUNE-UPS AND EQUIPMENT. HE IS AVAILABLE AT ALL TIMES TO HELP YOU WITH YOUR PROBLEMS. PLEASE DO NOT HESITATE TO ASK FOR HIS SERVICES, AND WE WILL BE ONLY TOO GLAD TO HAVE HIM GIVE YOU A HELPING HAND.

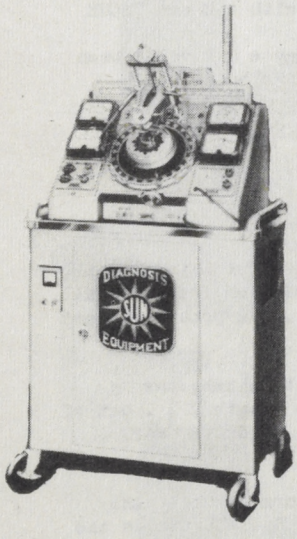
NET PRICE COMPLETE

$913.04



sun master distributor tester

ACCURATELY TESTS AND ADJUSTS DISTRIBUTORS OF ALL TYPES



Without precision timing no engine can function correctly. The SUN MASTER DISTRIBUTOR TESTER enables any mechanic to make exacting tests and adjust any car or truck distributor to the original manufacturer's specifications. Every distributor should be checked and tested at intervals of 5000 miles. No engine diagnosis is complete without an examination of the distributor on the SUN MASTER DISTRIBUTOR TESTER. All the operating conditions of the distributor are clearly shown and can be easily understood by any mechanic.
The MASTER DISTRIBUTOR TESTER now features the SUN expanded scale telescoping Manometer for measuring vacuum advance to 1/100 inch on the new low pressure distributors which depend on vacuum control rather than mechanical spark advance.

NET PRICE COMPLETE

$802.95

THE SUN MASTER DISTRUBUTOR TESTER WILL QUICKLY GIVE YOU THE FOLLOWING INFORMATION ABOUT ANY DISTRIBUTOR BEING TESTED.

1. Wear in distributor shaft and bushing.
2. Wear in distributor plate and housing.
3. Automatic spark advance.
4. Leaks in vacuum advance units.
5. Vacuum spark advance
6. Contact points dwell setting.
7. Synchronization of double breaker points.
8. Contact points spring tension.
9. Distributor circuit and contact point resistance.
10. Wear and inaccuracies in cam or distributor shaft.

1. Large 12 inch degree scale permits accurate reading of automati and vacuum advance curves.
2. All power supplied by a 110 Volt, 60 cycle A.C. Motor and a 6 Volt battery to operate the entire tester.
3. Variable speed drive--can be adjusted from 150 to 200 R.P.M., this steady speed allows accurate vacuum and automatic advance tests to be made.
4. Self centering adjustable clamp holds all types of distributors securely in perfect alignment while testing.
5. The three jaw universal lathe type drive chuck, of special design, simplifies driving all types of distributors.
6. Amplifying power pack is protected for long runs at high speed by graduated condenser contactor switch assembly.
7. Point resistance and R.P.M. are held at 2% accuracy by use of twin distributor and ground leads.
8. The 45 degree operating angle brings test to proper eye level. This is the nearest compromise angle from vertical to horizontal.
9. The neon tube has clean cut flashes even at top speed, thus guaranteeing extremely accurate tests.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

Scientific Automotive Service Equipment

sun compression tester



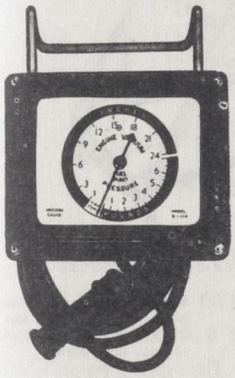
The Sun Compression Tester is a handy portable instrument that quickly shows the exact compression pressure in each cylinder in pounds per square inch.
The universal neo-prene fitting is adaptable to all spark plug holes, thus enabling you to make speedy compression tests on any make of car.
Model P Net Price Complete $17.17

power timing light



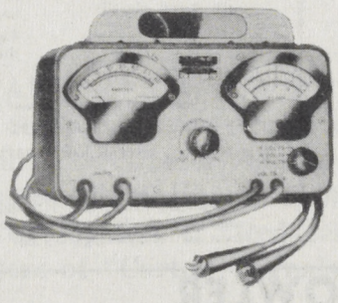
Now you can time an engine to the exact proper degree. Never before has this been possible with an inexpensive shop tool. With The SUN POWER TIMING LIGHT there is positively no blur-no smear-no error.
When you have an engine to time at exactly 5 degrees before dead top center, or any other fly wheel marking, just hook up The SUN POWER LIGHT and you will set it right on the nose.
Model X 6 Volt Net Price $31.31
Model X-1 12 Volt Net Price $36.86

sun vacuum tester



The readings indicate such trouble as: sticky valves, carburetor too rich or too lean, late timing, intake manifold air leak, defective exhaust system, plugged muffler or exhaust pipe.
Has large division scale of low range pressure in addition to vacuum reading to enable you to test fuel pump suction and pressure
All necessary adapters for quick connections are included.
Can be used on any make of car.
Model Q Net Price Complete $17.17

sun volts ampere tester

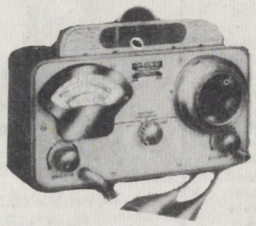


Generator and Voltage Regulator testing made easy--Voltage regulator setting simplified.
Generators play a very important part in the proper operation of the modern automobile.
With the Sun Volts Ampere Tester you can speedily set the charging rate of any generator and test the complete regulator for accuracy of operation.
FEATURES: 4-8-16 Volt scales for easy reading and maximum accuracy. 5 to 60 ammeter combined with a special variable resistance for regulator setting. 5 foot leads.
Model CA Net Price Complete $80.29

heavy duty volts ampere tester

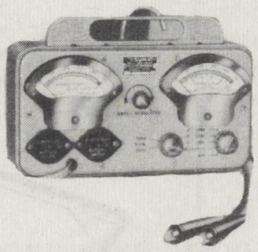
DESIGNED ESPECIALLY FOR TRUCKS, BUSSES, TAXICABS, AND OTHER VEHICLES WITH HEAVY DUTY GENERATORS.
Similar in appearance to the above.
Tests 6, 12, 24 volt systems with standard or heavy duty generators. Easy to read 0-4-8-16 and 40 Volt scales.
The 10 to 150 ammeter reads direct through heavy cables for testing all Heavy Duty generator regulators. Either set of ammeter test leads may be removed from the panel for convenience in application. All leads 5 feet long.
Model CA-2 Heavy Duty Net Price Complete $97.46

sun combustion tester



CABRURETOR TESTING MADE EASY AND ACCURATE.
Indicates all carburetion difficulties. Is just as simple to operate whether you are on the road or in the shop. This Tester indicates combustion efficiency (air fuel ratio) at all speeds. Two coloured bands on the meter scale show rich and lean readings for idle and high speed, a third band indicates the exact air fuel ratio. This Tester is designed to be quick-acting and serviceable, to show the slightest change in carburetor adjustments and to make accurate accelerator pump test.
Model H Net Price Complete $111.10

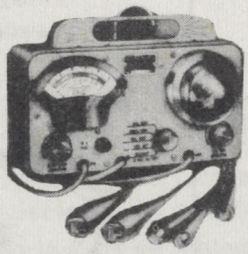
sun dwell-tach tester



CHECKS DISTRIBUTOR PERFORMANCE ON THE ENGINE---USED FOR ADJUSTING HYDRAMATIC TRANSMISSIONS.
So Easy to use that by one connection to the distributor, you know the exact distributor dwell angle or point setting and R.P.M. at any speed of the engine.
Point setting at all speeds from idle to top speed. Cam or camshaft which is not true or is bent out of position is clearly shown. Point fluctuation is also clearly shown.

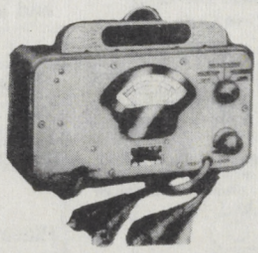
		Net Price
Model GA	6 & 12 Volt 4,6,&8 Lobe Cams	$97.46
Model GA-1	6 & 12 Volt 4,6,&8 Lobe Cams (in case)	111.10
Model GA-3	6 & 12 Volt 6,8,&12 Lobe Cams	111.10
Model GA-2	24 Volt 4,6,&8 Lobe Cams	111.10

sun coil tester



ANY COIL TESTING O.K. WILL PERFORM SATISFACTORILY. BAD COILS WILL BE CONDEMNED.
This Tester puts every Coil under the microscope. Proper coil testing is essential otherwise no reliance can be placed on the entire secondary ignition circuit of any engine. For effective snappy engine performance each spark plug must receive the proper amount of current continuously.
In addition to the coil test, this unit has a complete balance test for the entire secondary circuit. This enables you to locate corroded or loose secondary contacts.
Model AA Net Price Complete $97.46

sun condenser tester



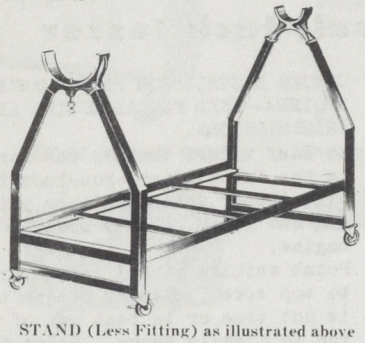
PUTS EVERY CONDENSER THROUGH THE THIRD DEGREE
Eliminates expensive, annoying trouble makers, but passes good condensers with a clean slate.
Positively shows if all contacts in the condenser and condenser circuit are O.K.
Simply turning the switch in the proper sequence makes the following necessary tests.
Microhm--which locates poor grounding contact in the condenser or condenser circuit, or defective pig tails.
Microfarad--which provides the essential check on capacity.
Megohm--which shows the condenser insulation condition.
Model B Net Price Complete $97.46

FOR FURTHER INFORMATION ON "SUN SCIENTIFIC EQUIPMENT" PLEASE WRITE US FOR A MANUFACTURER'S CATALOGUE.

ENGINE STANDS and FITTINGS

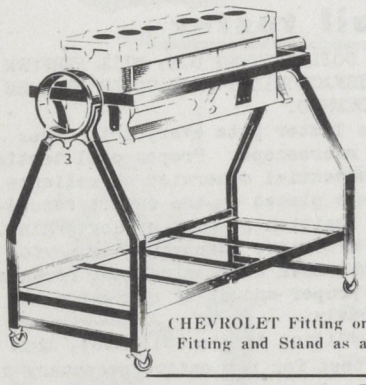
Every operation performed without removing block from stand

The "Carter" Stand with an engine block "Fitting" makes possible production line efficiency in every shop, no matter how small . . . increases production and lowers cost on every operation. Eliminates all handling of motor block during rebuilding. Entire block can be revolved for complete accessibility at all times for grinding seats, cutting valve clearances, etc. All parts can be replaced on motor ready to return to the chassis. Sturdily constructed. Completely mobile. Safe and easy to operate. Block may be steam cleaned on stand. Stand is equipped with two straight and two swivel casters with brake mechanism. All castings are high grade carbon STEEL,—about one-third stronger than malleable. Stand is equipped with locking index device which holds block in desired position for cylinder boring. Main bearing line boring and also cam bearing line boring, as well as the installation of the camshaft, is readily accomplished. A pan placed on the shelf will keep cylinder borings, etc., from being scattered over the floor.

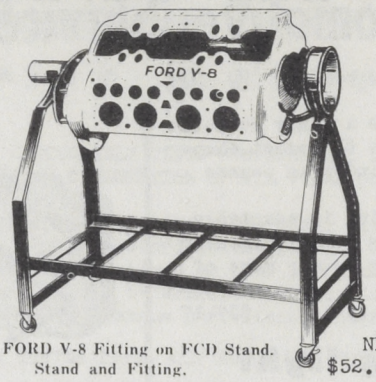


STAND (Less Fitting) as illustrated above For—Ford V-8, A, Chevrolet, Dodge and Plymouth. No. FCD.

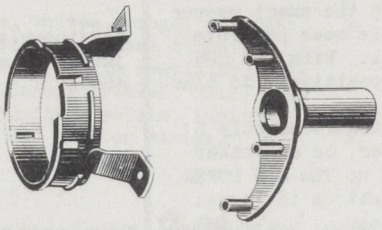
Stand only as above. NET $24.63
Stand Shipping Wght., 51 lbs.
Drip Pan extra, $5.10



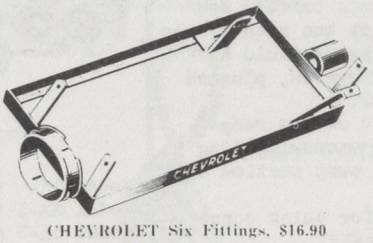
CHEVROLET Fitting on FCD Stand. Fitting and Stand as above. NET $52.60



FORD V-8 Fitting on FCD Stand. Stand and Fitting. NET $52.60

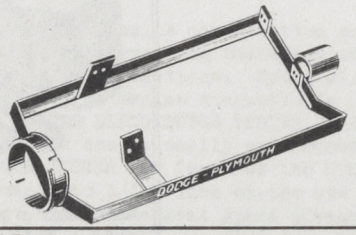


FORD V-8 Fittings, Per set $16.90
Shipping Wght., 17 lbs.
For Ford V-8, "60", "85", "95"



CHEVROLET Six Fittings, $16.90
Shipping Wght., 26 lbs.

DODGE-PLYMOUTH Fitting, $16.90
Fitting only, Wght., 26 lbs.
Fitting with FCD Stand
$49.90

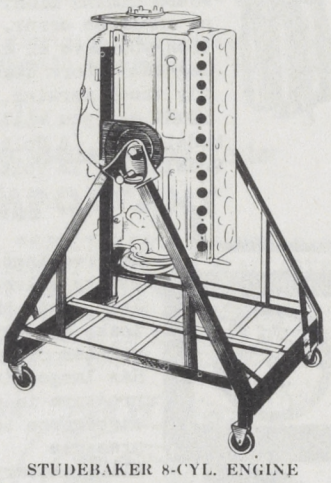


UNIVERSAL STAND

For ALL In-Line Automotive Engines to app. 600 lbs. weight. It also positions Transmissions, Differentials and Rear Axle assemblies. This "Stand" is not recommendel for Ford V-8 motors, because it will not permit the cylinder banks to be brought into vertical position for cylinder boring.

STAND complete as illustrated, less Drip Pan NET $73.14
Stand Shipping Wght. 135 lbs.
Drip Pan, 8 lbs, $5.10

Rails are shortened at this end to clear rear housing.



STUDEBAKER 8-CYL. ENGINE

Install oil pans, clutch housings, timing cases while block is conveniently positioned on the stand.

Plunger Release — one used each side. Pull out to turn motor. One has spring, one plain.

Will clear 24" clutch housings with stand closed.

Stand expands 6" at this point. Closed the stand handles about 80% of all automotive engines.

Two cap screws lock the expansion.

Overall length (closed): 34 inches.
Overall width 27⅛ inches
Overall height: 37½ inches

ALL Castings are of high grade Carbon steel—not cast iron. ALL joints are electrically welded. Two castors are stationery type, two swivel and EQUIPPED WITH BRAKES.

"Carter" ARMATURE GROWLER

Locates:—SHORTS - OPENS - GROUNDS

TESTS ALL SIZES OF AUTOMOTIVE ARMATURES



SHIP. WGHT. EACH 10 LBS.
O.D. Dimensions 9" x 6" x 4½"

NET PRICE: $19.40

Model 140-60C
110V, 60 Cycle, A.C.

Model 140-25C
110V, 25 Cycle, A.C.

CSA APP. No. 7553

Power Supply Cable on both of above has 3 PRONG attachment plug, as required by C.S.A.

Model 130
110V, 60 Cycle, A.C.

Power Supply Cable, has 2 PRONG attachment plug. Not C.S.A. approved.

Armature Ground Test

Place one Test Prod on core of the Armature, the other Test Prod on the Commutator. When this is done, if the light lights up the Armature is grounded, and a new Armature is necessary.

Test for Open Circuits

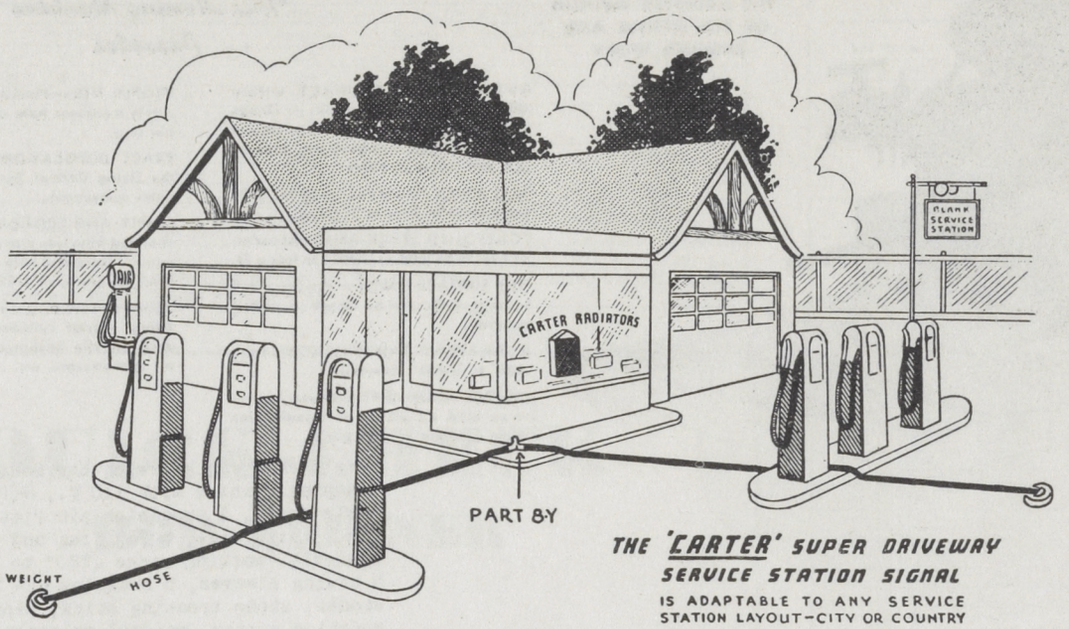
With Armature in "V" and the current turned on, short circuit the adjacent bars of the Commutator (four pole on top of Commutator—two pole on side facing operator) with thin blade of iron or steel. If sparks accompany this "shorting" it is normal—the Armature is good

Armature Short Circuit Test

Place Armature in "V" of Growler, and turn on current. Hold a hacksaw blade, or some other narrow, thin piece of iron or steel, on top of the Armature and in the direction of the Armature shaft. Rotate the Armature slowly by grasping the Commutator. On reaching a coil that is short circuited the blade will be strongly attracted to the Armature core, and will vibrate rapidly, denoting that the Armature is SHORTED. If the Armature is clear of shorts, the blade will not be attracted, nor vibrate.

The "CARTER" Super

SERVICE STATION DRIVEWAY SIGNAL



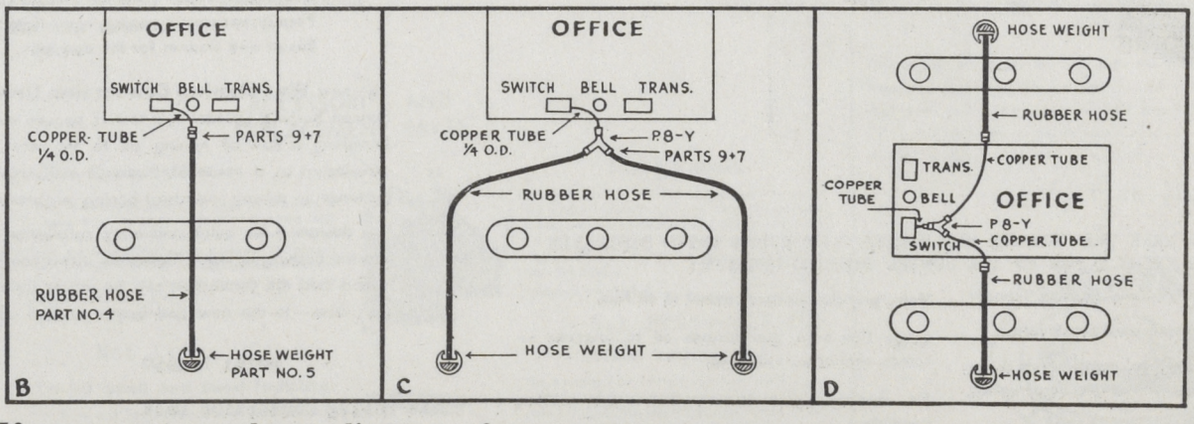
THE 'CARTER' SUPER DRIVEWAY SERVICE STATION SIGNAL
IS ADAPTABLE TO ANY SERVICE STATION LAYOUT—CITY OR COUNTRY

Net Price: $16.50

AN ABSOLUTE NECESSITY FOR THE PROGRESSIVE SERVICE STATION

EASILY AND QUICKLY INSTALLED. No liquid or anything else is used in hose or switch to evaporate, leak or freeze. Natural air pressure and electrically operated. Signal will not continue to ring if car stops on driveway hose. One or more bells can be operated off one signal. Driveway hose can be easily and quickly taken indoors when not required.

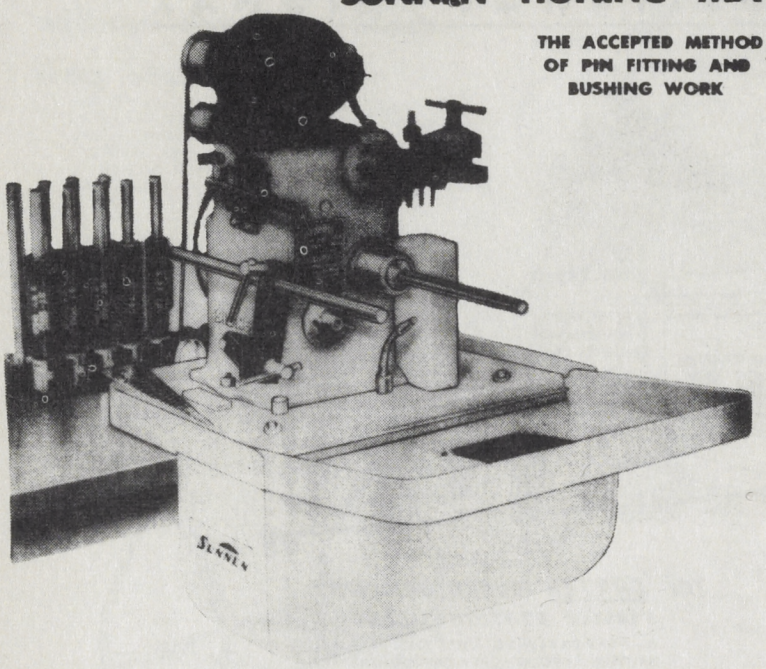
THE "CARTER" DRIVEWAY SIGNAL pays for itself in short time from extra profits received for prompt service at Gas Pumps, which prompt service also builds "Customer Good Will". The "Carter" Signal is indispensible, especially to combination Gas Stations and Garages. It "Increases Profits" as more attention can be given to Grease Pit, Wash Rack or to Repairs. It "Reduces Expenses" as it replaces a man to handle Gas Pumps only. Users of "Carter" Signals now, would not be without one.



If you care to send us a diagram of your station, showing distances between office and pumps, etc., and where you desire signal hose to lay, we will gladly send you our installation recommendation.

"SUNNEN AUTOMOTIVE EQUIPMENT"

SUNNEN HONING MACHINE MODEL LBA 50



THE ACCEPTED METHOD OF PIN FITTING AND BUSHING WORK

This Honing Machine Provides

GUARANTEED ACCURACY within .0001" (one ten thousandth) — Hones straight round holes free from chatter marks. Corrects out-of-round, tapered and bell-mouthed holes.

FAST STOCK REMOVAL — up to .010" per minute on bronze bushings.

CONTROLLED STOCK REMOVAL—Can be held to as little as .0001" to free a fit.

FINE SURFACE FINISH — Produces full bearing surface — no break-in period required.

OVERLAPPING RANGE OF SIZES, from .480" to 2.400" diameter.

PERFECT ALIGNMENT between bosses — no bind on piston or spindle pins when entering second boss.

PROPER FITS — Precision Gauge accurately measures hole size in relation to pin size.

EXACT DUPLICATION OF SIZE with the Sizing Control. Saves time—eliminates guesswork.

SIMPLE AND ECONOMICAL — Can be changed from one size to another in one minute. Unskilled help easily trained to produce precision work.

WIDE APPLICATION — Ideal for pin fitting, master cylinders, wheel cylinders, spindle bushings, water pumps, air compressors, etc.

Here's what you get with the Model LBA650: 1 Honing Machine with 110 V., S.P. 25 or 60 Cycle Motor, 1 precision pin fitting guage, 1 pin fitting vise, 5 roughing and 5 finishing mandrels (working range .720" to 1.020" Diam.) 5 truing sleeves, 5 roughing and 5 finishing stones, stone treating stick, mandrel rack, roughing cutter, mandrel selector, 2 extension wedges, operating instructions.

MODEL LBA650

Wet Honing Machine 60 Cycle.

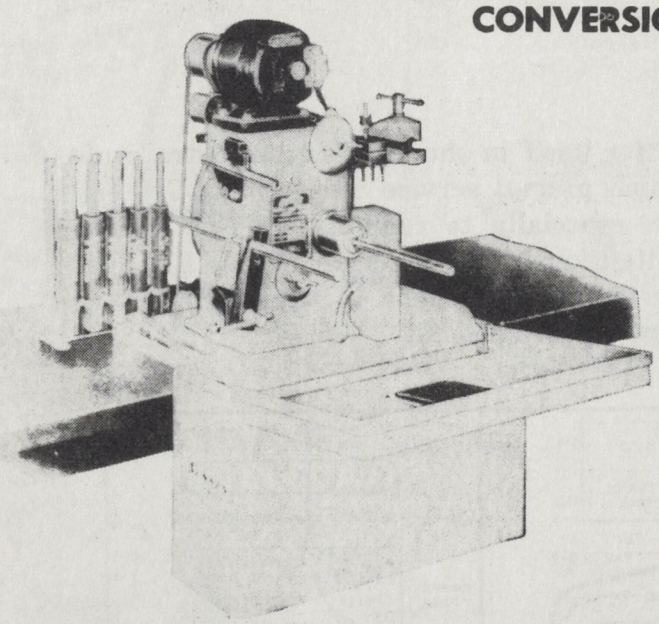
Net Price Complete: $375.00

Includes 6 Gals. No. MAN-845C Honing Oil Plastic Cover and Work Support.



Connecting rod bushings | Pin fitting jobs | Spindle body bushings | Steering sector housings | Hydraulic brake cylinders (both master and wheel) | Air compressor cylinders

CONVERT YOUR BUSHING GRINDER TO WET HONING WITH THE SUNNEN LBN 640 CONVERSION UNIT



GREATER ACCURACY— FASTER CUTTING— EASIER GAUGING—

Two to three times as fast as dry honing.
Better finish and closer tolerance.
Reduces gauging time—work is always clean.
Increases stone life—stones stay clean and free cutting.
Increases mandrel life—reduces wear.
Keeps parts cool—eliminates heat expansion.
Permits accurate gauging immediately.
Easier and cleaner for the operator.

This new **Wet Honing Conversion Unit** for the Sunnen Bushing Grinder is a tested, proven method of furnishing a flow of honing oil to the work. It was developed as a result of Sunnen's many years experience in solving industrial honing problems.

It is designed for quick and easy installation on your present Bushing Grinder. Complete instructions are furnished and the conversion can be made right in your own shop—to this new and better method of honing.

THESE FEATURES MAKE THE "SUNNEN WET HONING CONVERSION UNIT" DESIRABLE FOR EVERY OWNER OF THE SUNNEN BUSHING GRINDER:

Engineered specifically for your Bushing Grinder.

Easy to install—simple one-unit construction.

Sunnen multi-stage centrifugal pump is belt driven from Bushing Grinder motor—simple construction, only one moving part.

Continuous flow of oil directed along axis of mandrel. Most effective way to wash away cuttings.

Valve provides positive control of oil flow.

Large flow-back pan returns oil to reservoir — screen eliminates splashing.

Six imperial gallon reservoir has ample settling capacity.

Space for draining parts provided on either side of machine.

Model LBA640

Wet Honing Conversion Unit.
Net Price Complete: $125.00
Includes 5 Gals. No. MAN-845C. Honing Oil.

WE SPECIALIZE IN WILSON ELECTRODES

SUNNEN AUTOMOTIVE EQUIPMENT

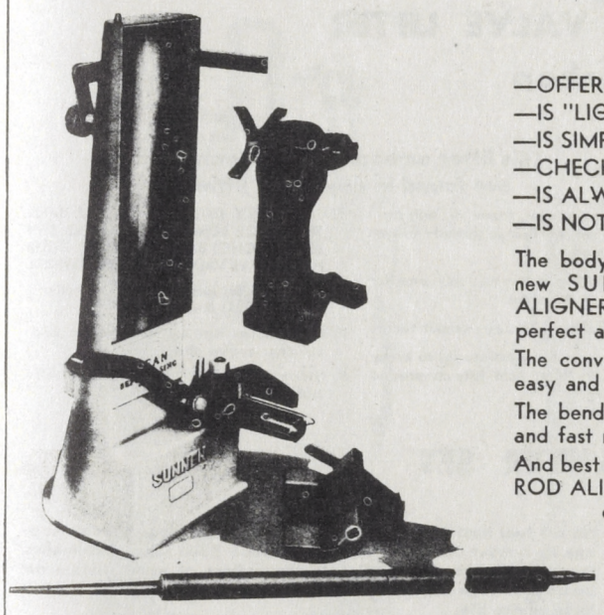
Automotive Stone Chart

FOR USE WITH MANDRELS	FOR USE DRY		FOR USE WITH FLOW OR HONING OIL			List Price
	Roughing	Finishing	Roughing	Finishing	General Purpose	
SL-480 thru SL-660	SL-1	SL-3	SL-1	SL-3		$1.10
SL-720 thru SL-2300	SL-5	SL-7	SL-5	SL-13	SL-7	1.70
HB-1000 thru HB-1375	HB-5	HB-7	HB-7	HB-13		1.70
Extension Stone for HB Mandrels	XHB-5	XHB-7	XHB-7	XHB-13		1.70
SC-1000 thru SC-1375	SC-5	SC-7	SC-7	SC-13		1.70
Extension Stone for SC Mandrels	XSC-5	XSC-7	XSC-7	XCS-13		1.70
ML Series	ML-5	ML-7	ML-5	ML-13	ML-7	.90
PL Series	PL-5	PL-7	PL-5	PL-13	PL-7	1.00
KL Series	Not Used	Not Used	KL-5	KL-13	KL-7	.90
KB Series	Not Used	Not Used	KB-7	KB-13		1.10
BBN Rod Grinding Outfit	SL-8*	SL-17*				

*SL-8 and 17 stones should not be used with a flow of honing oil but lubricated with lard oil or heavy honing oil, applied with brush or oil can.

HHN-50 Rod Relief Grinder—Finishing Stone HHN-18. Shipping weight ¼ lb. each.

QUICK-CHECK
ROD ALIGNER



This new piece of SUNNEN equipment fills a long-felt need of shops both large and small by providing a rod aligner that:

—OFFERS EXTREME ACCURACY
—IS "LIGHTNING" FAST
—IS SIMPLE IN OPERATION
—CHECKS ANY SIZE ROD
—IS ALWAYS IN PERFECT ALIGNMENT
—IS NOT AFFECTED BY TAPER OF PISTON

The body, surface plate and mandrel of the new SUNNEN QUICK-CHECK ROD ALIGNER are cast in a single piece—assuring perfect alignment at all times.

The convenient V-Block makes checking fast, easy and extremely accurate.

The bending bar provides a simple, yet easy and fast method of straightening rods.

And best of all, the SUNNEN QUICK-CHECK ROD ALIGNER is priced so low that no shop can afford to be without it.

Includes side clamping fixture for handling V-8 Ford Rods.

Complete Unit — includes Rod Aligner, V-Block, Bending Bar, and Side Clamping Fixture.

Net Price $72.00

ACCESSORIES AND REPLACEMENT PARTS

TN-150 Side Clamping Fixture

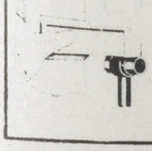


This unit handles worn V-8 rods. It provides a simple, easy, accurate method of checking from the sides of the rod which are ground square with the bore. Checks any make of rod that is very narrow and has no bearing-metal flange. Complete — ready for mounting on the Sunnen Quick Check Rod Aligner.

Shipping weight 3¾ lbs.

Net Price $10.00

TN-50 Bend and Twist Indicator

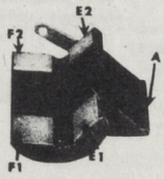


The Bend and Twist Indicator is used for checking the alignment of a rod when the piston is not assembled.

Shipping Weight 2½ lbs.

Net Price $10.00

TN-46 V-Block

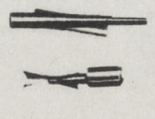


The surfaces E-2 and F-2 contact the ring lands, E-1 and F-1 contact the skirt. These lapped surfaces are all parallel to the checking surface "A." This method of checking guarantees a high degree of accuracy with both cam-ground and tapered pistons.

Shipping weight 2 lbs.

Net Price $12.00

TN-40 Bending Bar



The Bending Bar is fitted with two tapered tool steel points. The large point is used on regular pins — assures accurate bending without damage to pin. The small point is used only with small tapered bore pins.

Shipping weight 5¾ lbs.

Net Price $7.00

Mandrels and Truing Sleeves

Size range .480" to .720"

Size Range	Mandrel No.	List Price	Truing Sleeve No.	List Price
.480" to .540"	SL-480	$2.30	ST-480	$ .80
.540" to .600"	SL-540	2.30	ST-540	.80
.600" to .660"	SL-600	2.30	ST-600	.80
.660" to .720"	SL-660	2.30	ST-660	.80

Size range .720" to 2.400"

Size Range	Mandrel No.	List Price	Truing Sleeve No.	List Price
.720" to .780"	SL-720	$2.50	ST-720	$1.60
.780" to .840"	SL-780	2.50	ST-720	1.60
.840" to .900"	SL-840	2.50	ST-840	1.60
.900" to .960"	SL-900	2.50	ST-900	1.60
.960" to 1.020"	SL-960	2.50	ST-960	1.60
1.020" to 1.080"	SL-1020	2.80	ST-1020	1.80
1.080" to 1.140"	SL-1080	2.80	ST-1080	1.80
1.140" to 1.200"	SL-1140	2.80	ST-1140	1.80
1.200" to 1.300"	SL-1200	2.80	ST-1200	1.80
1.300" to 1.400"	SL-1300	2.80	ST-1300	1.90
1.400" to 1.500"	SL-1400	2.80	ST-1400	1.90
1.500" to 1.600"	SL-1500	2.80	ST-1500	1.90
1.600" to 1.700"	SL-1600	3.20	ST-1600	2.20
1.700" to 1.800"	SL-1700	3.20	ST-1700	2.20
1.800" to 1.900"	SL-1800	3.20	ST-1800	2.20
1.900" to 2.000"	SL-1900	3.20	ST-1900	2.40
2.000" to 2.100"	SL-2000	3.20	ST-2000	2.40
2.100" to 2.200"	SL-2100	3.20	ST-2100	2.40
2.200" to 2.300"	SL-2200	3.20	ST-2200	2.40
2.300" to 2.400"	SL-2300	3.20	ST-2300	2.40

Use of Truing Sleeves

It is very important that you have a Truing Sleeve for each size SL Mandrel. Truing Sleeves are used to keep mandrels and stones parallel and in good working condition. However, truing sleeves are not required for type HB and SC mandrels.

Hydraulic Brake Cylinder Mandrels

For wheel cylinders and master cylinders

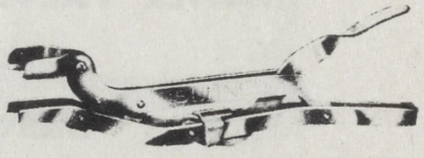
Size Range	Mandrel No.	List Price	Use With
1" to 1¼"	HB-1000	$2.50	HB Type Standard Stones (See Stone Chart)
1¼" to 1⅜"	HB-1250	2.50	
1⅜" to 1⅝"	HB-1375	2.50	
1⅝" to 1¾"	*HB-1250	2.50	XHB Type Extension Stones
1¾" to 2"	*HB-1375	2.50	

No Truing Sleeve required with HB Mandrels.

*XHB Type Extension must be used with XHB Type Extension Stones in size range shown.

Replacement Stone Retainer Spring LN-108.

CL-11 Semi-adjustable Valve Lifter



The design of many motors, with the manifold only a few inches from the frame of the car, necessitates the use of a valve lifter that gets under the manifold and block casting. With the Sunnen CL-11 Valve Lifter — valve work can be handled quickly on these motors. A quality lifter at a low price. Shipping weight 1 lb.

Net Price $2.30

GET IT FROM YOUR JOBBER TRADE MARK

SUNNEN AUTOMOTIVE EQUIPMENT

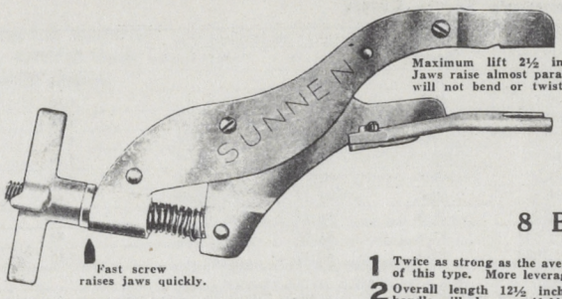
The New "STUB" VALVE LIFTER

Especially for Such Cars as Late Model

Chryslers, Oldsmobile, Pontiac, Studebaker, Terraplane, Etc.

ON most late model motors, the manifold hangs so low and the fender is so close that if the conventional type of valve lifter is made short enough to clear the fender, the handle will strike the manifold. That is why you will like this entirely new STUB Valve Lifter.

1. No handle to strike the manifold.
2. Short—only 8¾ inches long.
3. Fast Screw that quickly raises the jaws.
4. Fast Screw that positively holds jaws at any height desired.
5. Locks automatically at any height.
6. Jaws raise practically parallel.
7. Top jaws fully adjustable to any size spring.
8. Strong—made of Cold-Rolled Steel—will lift over 300 pounds easily.



9 Plenty of room between jaws to use split lock replacer.

10 Can be operated with one hand on any valve in the motor — either over or under the fender.

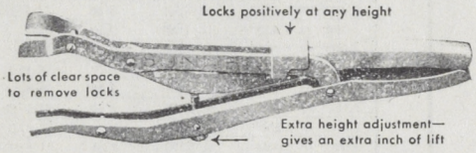
—works equally well on other cars

NET PRICE: $3.50

8 BIG FEATURES

1. Twice as strong as the average lifter of this type. More leverage.
2. Overall length 12½ inches — so handle will clear manifold.
3. Jaws raise practically parallel. Will not wedge spring on valve stem.
4. Upper and lower jaws fully adjustable.
5. Very narrow and compact. Lots of room to remove locks.
6. The famous SUNNEN Friction Lock will positively hold Lifter at any height—no ratchet to wear out or slip.
7. Quick extra height Adjustment gives an extra inch of lift. Maximum lift 3¼ in.
8. Made of cold rolled steel, cadmium plated. Weight 1½ pounds. Guaranteed against breakage for one year.

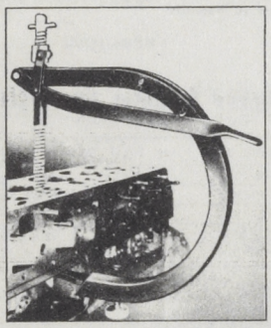
HL-88 HEAVY DUTY VALVE LIFTER



The SUNNEN HEAVY DUTY VALVE LIFTER is especially built to stand up under the heaviest work such as the heavy springs in trucks and bus motors---yet it works equally as well on small motors (including Continental) Lower jaws of channel steel construction (like the frame of an automobile) give maximum strength but make the lifter no wider and requires no more room to operate than lifters of lighter construction. Upper jaws laminated for greater strength and wider adjustment.

Net Price: $3.80

DL120 UNIVERSAL "C" TYPE VALVE LIFTER



New DL-120 Lifter

Shown on late model White block—easily handles tough jobs where space is limited.

An indispensable tool for every shop which services —

Overhead Valve Motors. . .Truck and Tractor engines. . .Motors with hydraulic tappets. . .L-Head engines requiring a "C" Type lifter. . . Cadillac motors.
This heavy duty lifter is completely new from top to bottom. Handles

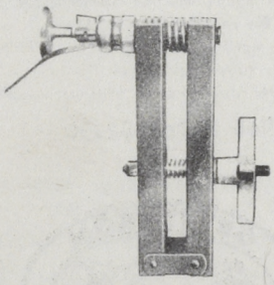
Net Price: $23.50

This lifter embodies many features not found in any other lifter:

1. Heat-treated tubular frame of high carbon steel—will not twist or spread—tested to ½ ton load.
2. Range adjusting screw—set only once for all springs in the motor.
3. Powerful pull-type linkage—cannot buckle.
4. Handle locks in two positions: (a) to break frozen locks; (b) to hold fully compressed valve spring.
5. POSITIVELY CONTROLLED ONE-HAND RELEASE OF LOWER JAW—LOCKS CAN BE POSITIONED SAFELY WITH THE OTHER HAND WHILE VALVE SPRING IS LOWERED.
6. Set of jaws fits springs up to 2" diameter—change jaws in 5 seconds.
7. Quick-change high and low level jaw holders clear engine obstructions.
8. Strongest lifter ever made—well-balanced—weighs only 7¾ lbs.

NEW VL48 FORD V-8 LIFTER SET

FASTER VALVE SERVICE ON V-8 FORD AND MERCURY MOTORS.



REMOVES MOST STUBBORN VALVE GUIDES
A COMPLETE VALVE TOOL SET FOR ALL 85, 95, and 100 HORSEPOWER MOTORS

Net Price: $10.50

Here's a new set of tools that provides an improved method by which you can remove and re-assemble Ford and Mercury valves quickly and with the least amount of work. No other accessories are required to do this job. The Sunnen Ford Lifter Set works equally well on all Ford V-8 models, including the '46 and '47 models with "close-coiled" springs.

Set consists of:

1 —VL-41 Three foot lifter bar
1 —VL-25 Protector plate
1 —VL-43 Valve guide driver
1 —VL-35 Spring compressor
9 —VL-29 Valve props

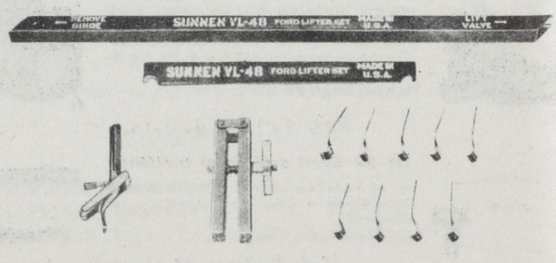
New 3 foot heat treated alloy steel lifter bar provides enough leverage to remove the most stubborn, carbon filled valve assemblies. Force of lifter bar is applied to the bottom of valve stem — not inserted through the spring coils. Ends of bar are hardened to assure long service life.

Protector plate prevents damage to edge of block.

Hardened forged-steel valve guide driver is used to drive down stuck valve guides. Driver is easily inserted — locks in place and holds valve open to prevent damage to valve and seat while driving the guide down. Adjustable for different size valves. This tool is designed to give ample clearance on Ford valves with the latest type "close-coiled" springs.

Improved spring compressor permits dis-assembly and re-assembly at the motor. Compresses springs with a minimum of effort.

New heat treated spring steel valve prop works on all Ford and Mercury valves. Positively holds spring compressed, during re-assembly, cannot slip out of place.



ALEMITE LUBRICATION EQUIPMENT

ALEMITE

"Atomic 81"

- CHASSIS ALEMITER
- GEAR LUBE ALEMITER
  Air Operated
- WASTE OIL DRAIN

• Alemite "Atomic 81" offers everything you need for a modern lubrication department . . . and everything you want in top quality, design and performance at a popular price.

Pump direct from original 100-lb. Eastern or Western drums. These portable units have identical steel cabinets with Two-Tone finish in lustrous gray and white baked enamel, black base with protective fenders, and chrome handles. Colorful interchangeable emblem for oil or car company identification.

. . . Everything You Need for a Complete, Modern

LUBRICATION DEPARTMENT

"Atomic 81"
Air Operated
CHASSIS ALEMITER
Model 8103



High pressure "Atomic" pump mechanism develops grease pressure 40 times air pressure used. Delivers 35 oz. chassis lube per minute at room temperature. Complete with 6 ft. hose, adjustable control valve with hydraulic coupling and quick detach air coupling.

Net Price: $174.95

"Atomic 81"
Air Operated
GEAR LUBE ALEMITER
Model 8112



Features the "Atomic" pump mechanism, volume type, unequalled for rapid dispensing of gear lube from original 100 lb. drum directly into rear axle of transmission. Piston 4 to 1 ratio delivers 10½ lbs. SAE 90 per minute at room temperature. Has 6518 meter, 5½ ft. hose and control valve.

Net Price: $170.00

"Atomic 81"
DRAIN
Model 8130

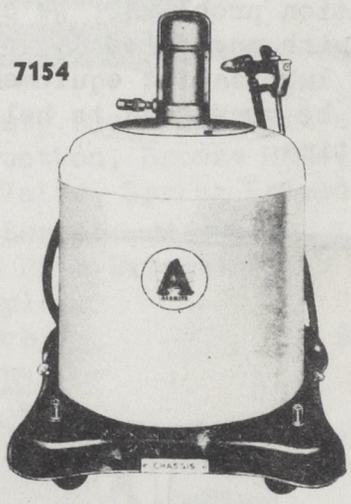
Drain bowl extends to a maximum height of 66" for draining any gear case when the car is on a lift. Bowl is held automatically at desired height--has splash plate for side outlets and a strainer to prevent loss of drain plugs. Float type indicator shows when container is full.

NET PRICE: $59.00

PORTABLE CHASSIS LUBRICATOR
LOW COST, HIGH PRESSURE

ALEMITE "Atomic 71"

MODEL 7154



Alemite's "ATOMIC 7154" offers you power lubrication at low cost. It pays its way by turning our better lubrication jobs faster at more profit to you. This compact space saving unit has ample pressure at the control valve to lubricate toughest bearings. It has many exclusive features ordinarily available only in higher priced units. Positive delivery of all types of chassis, viscous and fibrous lubricants. No messy transferring--lubricant is delivered direct from original 5 to 50 lb. containers.

NET PRICE: $129.50

ALEMITE "ATOMIC"

LUBRICATION EQUIPMENT

WALL ALEMITERS

CENTER ALEMITERS

ALL PUMPS IN IDENTICAL UNITS

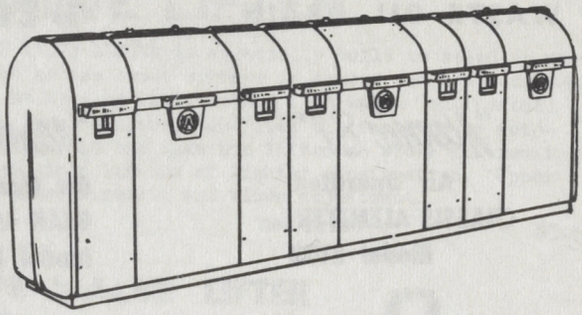
. . . this is the "heart" of the sectionalized system

All pumps in the new line—chassis, gear or oil—are enclosed in identical cabinets. All have the same gleaming finish of baked enamel, the same massive hardware, the same dimensions. All dispense lubricant direct from original 100-lb. drums. All have the "Skyscraper" construction for new structural strength.

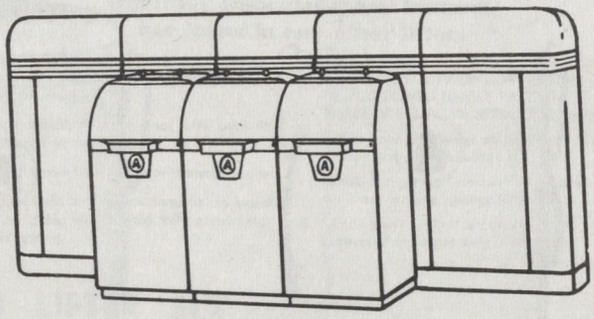
Alemite *"Atomic"* is a full line of pumps, reels, drains and accessories—each one enclosed in a basic cabinet—*all matching —all with work-saving, money-making new features!*

While variations are limitless, shown in this catalog are combinations which we believe are the most logical and practical.

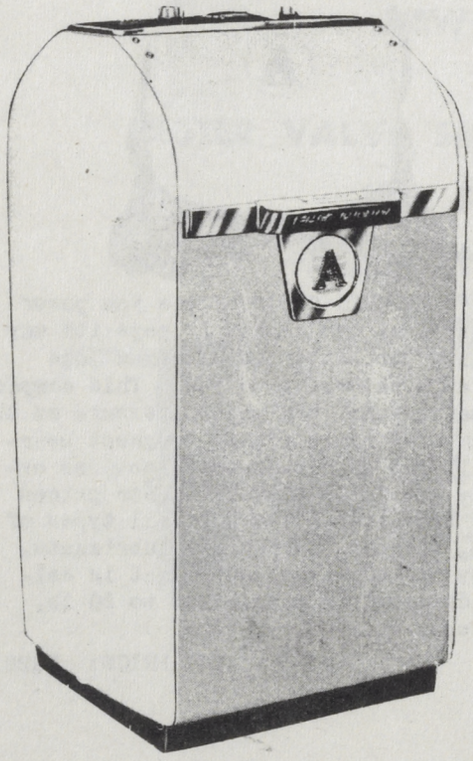
Please write us for complete information in respect to your lubrication problems. We can supply you with suggested lay-outs for your lubricating equipment. We will be very glad to help you at any time



2763-A—1 chassis pump, 2 gear pumps
2 plain panels



Three pumps, five reels
8085 Series—Spring operated reels
8095 Series—Air operated reels



THE SENSATIONAL "ATOMIC" PUMP

. . . a revolutionary development in lubrication engineering

The *"Atomic"* line is new—*all the way!* Not only new styling, new sectionalized design — but also a thoroughly tested new pump that represents seven years of engineering. It is more responsive, has a longer stroke, delivers *more* lubricant *faster,* has fewer working parts, a power unit sealed-in . . . all backed by Alemite's "Guaranteed Performance" Policy.

FLEXIBLE TO FIT YOUR NEEDS

. . . new display for any size or shape of service area

Since the sectionalized system is planned for *your* convenience, you are now able to choose equipment to fit exactly the requirements of your space . . . simple to install . . . simple to maintain . . . and easy to rearrange should changes in your location or working area demand it.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

ALEMITE HAND GUNS and FITTINGS

DRIVE FITTINGS

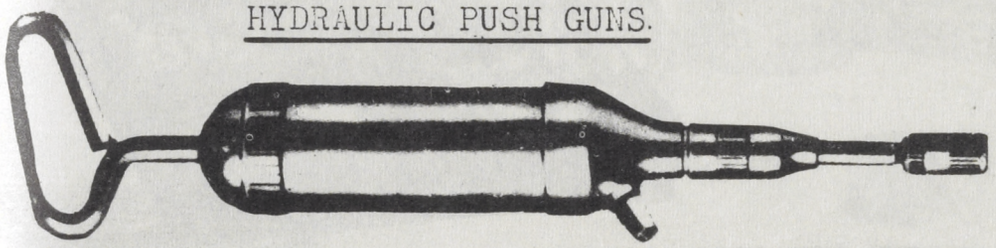
	List Price		List Price
1699--5/16" Str.	.08	1630--5/16" 67½ Elb.	.24

ALEMITE BUTTON HEAD FITTINGS

For Industrial Application, such as Idler Roll Conveyor Bearings, heavy Machinery, Contractors Equipment and Track Type Tractors.

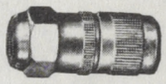
	List Price		List Price
1184--1/8 P.T. 3/4 Long	.20	1822A--3/8 P.T. 3/16 Long	.60
1186--1/4 P.T. 53/64 Long	.23	1823 --1/4 P.T. 1 1/4 Long	.60
1188--3/8 P.T. 61/64 Long	.30	1825 --3/8 P.T. 2" Long	.85

HYDRAULIC PUSH GUNS.



	List Price
7553--1 3/4 lb. Push Gun 20 3/4"	11.95
7584--9 oz. Push Gun 14 3/4"	5.60
6557--3 oz. Push Gun 9 3/4"	1.85

HYDRAULIC COUPLINGS



6304-B

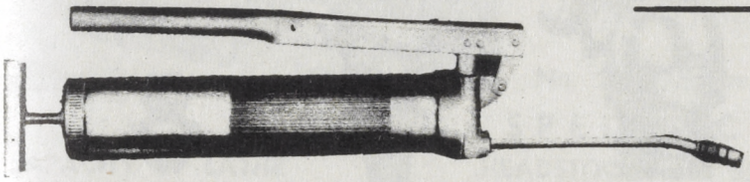


G-53768

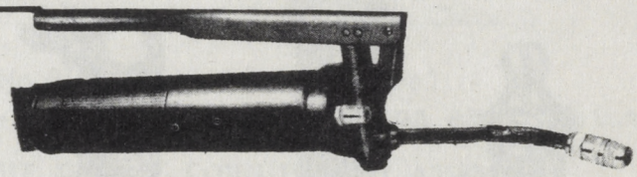
List Each

.75 .80

LEVER GUNS



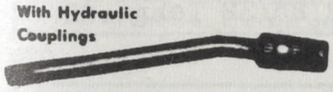
6578F Economy Lever Gun, a sturdily constructed low priced Gun for general Farm use. Spring primed, disappearing handle. Capacity 1 lb.
Complete with Pipe Extension & Hydraulic Coupler.
List Price Ea. $4.95



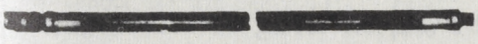
4817 Heavy Duty Lever Gun, Extra strong construction, Bronze Head, Internal Check Valve, Spring Primed, disappearing handle.
Complete with Pipe Extension and Hydraulic Coupler.
List Price Each. $8.95

HOSE AND EXTENSIONS FOR LEVER GUNS

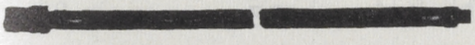
PIPE EXTENSIONS With Hydraulic Couplings



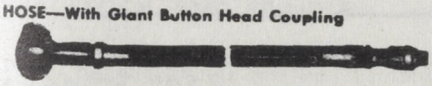
HOSE—With Hydraulic Coupling



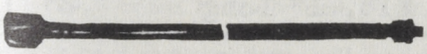
HOSE—With Pin Type Coupling

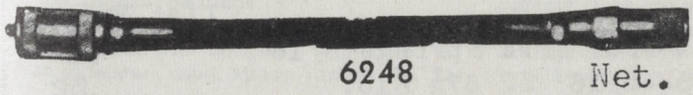


HOSE—With Giant Button Head Coupling



HOSE—With Standard Button Head Coupling





6248

Model No.	Length	End. Conn.	List Price
303350	8-9/16"	⅛" P.T.	$ 1.65
6654-C	20"	⅛" P.T.	8.25
A-908-A	13⅜"	⅛" P.T.	7.75
6829-A	17½"	¼" P.T.	9.65
1189	15½"	⅛" P.T.	11.75

Net. 2.75

BUTTON HEAD COUPLINGS



G-42030



G-304300

GENUINE ALEMITE FITTINGS

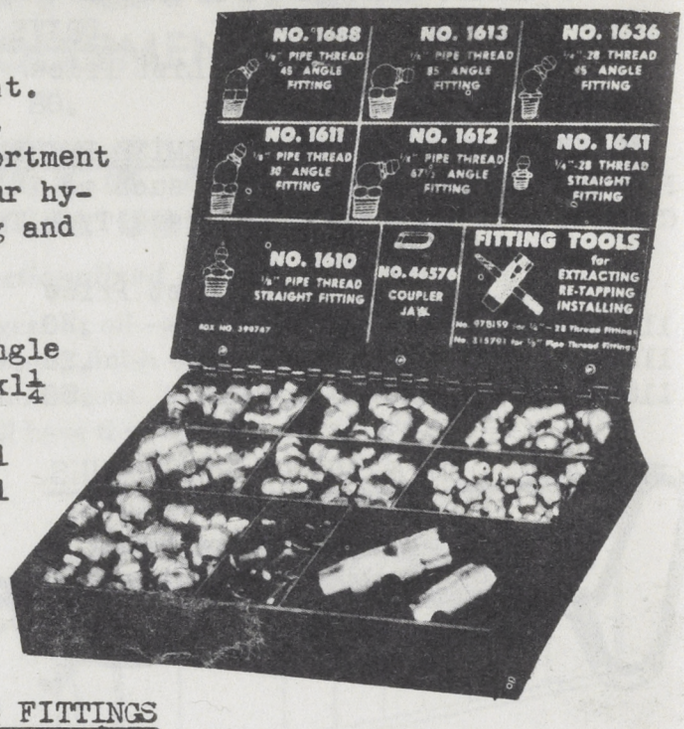
MODEL 2364 FITTING ASSORTMENT

Here is a brand new Alemite fitting Assortment. Tailor made for Service Station requirements. Included in one compact steel box, is an assortment of popular fittings, replacement Jaws for your hydraulic couplers and two Tools for extracting and replacing fittings.

CONTENTS

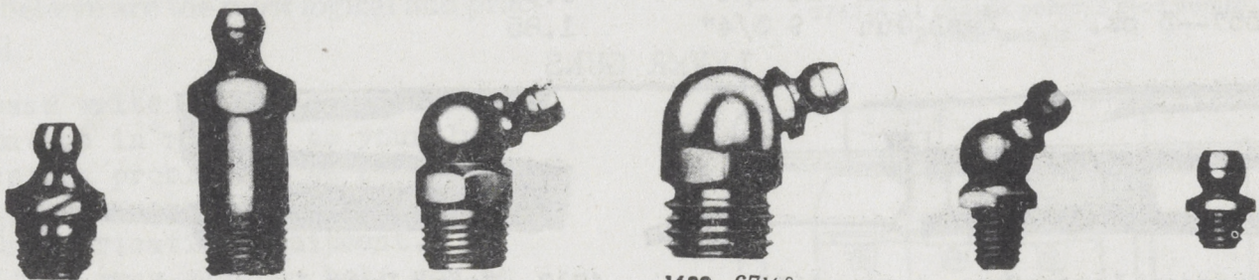
48-1610	1/8" Straight	12-$\frac{1}{4}$--28 Thd. 45 Angle	
12-1611	1/8" 30 Angl2	1-Metal Box $5\frac{1}{4}$x$7\frac{1}{4}$x$1\frac{1}{4}$	
12-1688	1/8" 45 Angle	12-46576 Jaws	
12-1612	1/8" 67$\frac{1}{2}$ Angle	1-978159 Ftg. Tool	
12-1613	1/8" 90 Angle	1-315791 Ftg. Tool	
24-1641	$\frac{1}{2}$--28 Thd. Strt.		

LIST PRICE: $21.50



ALEMITE HYDRAULIC FITTINGS

Alemite hydraulic fittings are used as standard equipment on all Canadian Cars, Trucks, Tractors and Farm equipment.



1/8" PIPE THREAD FITTINGS

	List Price
1610--1/8" P.T. Str. 3/4 Long	.09
1607--1/8" P.T. Str. 1 17/16 Long	.25
1699--1/8" P.T. Str. 1 3/4 Long	.10
1684--1/8" P.T. Str. 2 5/8 Long	.55

	List Price
1611--1/8" P.T. 30 Elb. 1 1/4 Long	.16
1612--1/8" P.T. 67$\frac{1}{2}$ Elb. 53/64 Long	.16
1613--1/8" P.T. 90 Elb. 49/64 Long	.16
1688--1/8" P.T. 45 Elb. 61/64 Long	.18
1638--1/8" P.T. 30 Elb. 2 9/32 Long	.55
57769-1/8" P.T. 67$\frac{1}{2}$ Elb. 2 25/32 Long	.65

1/4" 28 THREAD FITTINGS

	List Price
1641--$\frac{1}{4}$ 28 Str. 31/64 Long	.09
1652--$\frac{1}{4}$ 28 Str. 43/64 Long	.15
1680--$\frac{1}{4}$ 28 Str. 59/64 Long	.25
1698--$\frac{1}{4}$ 28 Str. 1 7/64 Long	.25

	List Price
1636--$\frac{1}{4}$ 28 45 Elb. 31/32 Long	.21
1637--$\frac{1}{4}$ 28 45 Elb. 7/8 Long	.22
1911--$\frac{1}{4}$ 28 45 Elb. 3/4 Long	.26

1/4" PIPE THREAD FITTINGS

	List Price
1627--1/4" P.T. Str. 59/64 Long	.21

	List Price
1629--1/4" P.T. 67$\frac{1}{2}$ Elb. 1" Long	.28

SPECIAL THREADS

	List Price
1631--5/16 32 Str. 31/64 Long	.19
1710--For Ford Springs 3/8	.17

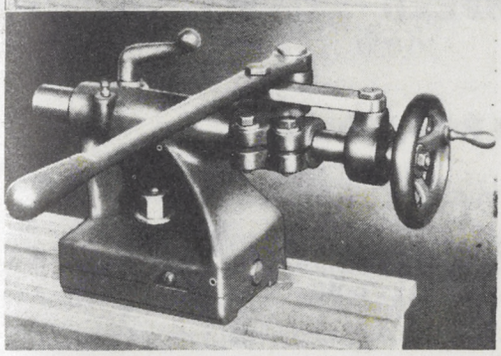
	List Price
1711--For Ford Springs 5/16	.17
1763--5/16 32 67$\frac{1}{2}$ Elb.	.32

YOU CAN BE SURE WITH PROVEN PRODUCTS.

Logan

BACK GEARED SCREW CUTTING LATHE





10" Swing; 24" Between Centers
10" Swing; 31" Between Centers

No. 210 Complete As Shown, Less Motor, F.O.B. Chicago.

No. 210-1 Complete with No. AC-241 Lever Tailstock Assembly Replacing Regular Tailstock, Less Motor, F.O.B. Chicago.

No. 211 (Same as No. 210, but 31" between centers.)

Prices on Application.

SPECIFICATIONS

CAPACITY OF LATHE

Swing over bed and saddle wings. 10½"
Swing over saddle cross slide..... 6⅛"
Distance between centers..... 24"

THREADS AND FEEDS

Reversible power longitudinal feed
Reversible power cross feed
Lead Screw diameter and threads per in. ..... ¾"-8
Threads—46 selections RH or LH..... 4-216 per in.
Independent change gears—17 furnished (6 on Lathe and 11 extra)
Width of face of change gears..... $\frac{7}{16}$"

BED

Width of bed across ways..... $6\frac{15}{16}$"
Bed Length (No. 210 and 210-1).... 43⅛"
Bed length (No. 211)..... 50"
Precision ground ways; 2 prismatic "V" ways and 2 flat ways.

HEADSTOCK AND SPINDLE

Front bearing—double row ball bearing.
Rear bearing—single row ball bearing.
Note: Sealed, pre-loaded New Departure Ball Bearings of the highest precision type are used.
Back gear shaft bearings—self lubricating bronze bearings.
Hole through spindle..... $\frac{25}{32}$"
Morse Taper with adaptor... No. 3-No. 2
Size of centers used, Morse Taper.. No. 2

HEADSTOCK AND SPINDLE Contd

Spindle nose diameter and threads per in. ..... 1½"-8
Width of cone pulley steps for belt... 1"
Width of face of bull gear and back gears ..... ⅝"
Face plate diameter..... 6"
Number of spindle speeds..... 12
Spindle speeds, back gears engaged..... 30, 56, 70, 104, 131, 244
Spindle speeds, direct belt driven.... 179, 334, 420, 620, 780, 1450

CARRIAGE AND COMPOUND REST

Cross slide graduated in thousandths. Travel ..... 6¼"
Cross feed screw mounted on self-lubricating bronze bearings.
Compound rest top slide graduated in thousandths. Travel ..... 2¼"
Top slide screw mounted on self-lubricating bronze bearings.
Compound rest swivel — graduated 90° in both directions.
Tool post opening for tool holder shank ..... ⅜x¾"
Size of cutter bits used..... ¼" sq.

TAILSTOCK

Spindle travel ..... 2⅜"
Spindle graduations ..... $\frac{1}{16}$"
Morse Taper center..... No. 2
Tailstock top will set over for taper turning ..... $\frac{11}{16}$"

COUNTERSHAFT ASSEMBLY (Included in Price of Lathe)

2 Speed "V" Motor Pulley ⅝" Bore ..... 2⅜"-4"
2 Speed countershaft flat pulley ..... 8⅝"x9⅞"
40"x½" V Belt used on flat of 2 step countershaft pulley and in V of motor pulley.
3 Step flat belt cone pulley mounted on countershaft. Width of step face.... 1"
Countershaft mounted on self-lubricating bronze bearings.
Adjustable motor mounting bracket furnished with countershaft assembly.
Countershaft assembly independently supported on patented 3 point suspension.
Countershaft assembly completely insulated with rubber to prevent vibration being transmitted to lathe.
Countershaft and all pulleys completely enclosed and guarded.
Automatic belt tension release when guard for cone pulleys is raised to change belt steps.

LATHE EQUIPMENT (Included in Price of Lathe)

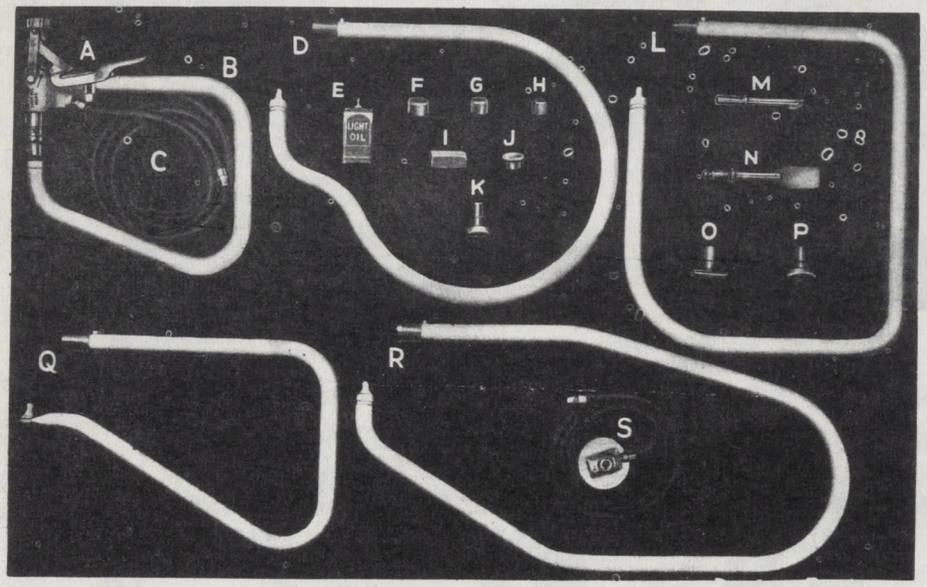
1	6" Face Plate	1	No. 3-No. 2 Morse Taper Adaptor
2	60° Centers		
17	Change Gears	1	Tool Post Holder and Wrench
1	Threading Dial		
1	Threading Chart	1	Tailstock Wrench

Watervliet High Speed Pneumatic Vibrator

THE MUFFLED FENDER AND BODY TOOL THAT "LOCKS ON THE WORK"

NO BOUNCE — NO STRETCH

The **FASTEST, LIGHTEST, QUIETEST** pneumatic tool for SMOOTHLY FINISHING AUTOMOBILE FENDERS, BODIES, PANELS, COWLS, DECKS, HOODS, TURRET TOPS, HUB CAPS, RADIATOR SHELLS, LAMPS, ETC.



A BETTER JOB
Than can be done by hand.

TIME SAVING
50% to 75% on every job.

SPEED
10,000 vibrations per minute.

LESS NOISE
Muffled air exhaust.

LIGHT IN WEIGHT
11½ pounds.

OUTFIT No. V-150 ..... **$231.00**
More jobs can be done and greater profits made with this outfit. It equips a shop to handle every job on all cars, busses, and trucks. Consists of items A-S inclusive shown above. (Shipping wt. 71 lbs.)

OUTFIT No. V-1 ..... **138.60**
Suggested for small shops and service stations doing simple fender work. Consists of items A to K inclusive. (Shipping wt. 32 lbs.)

A — No. 72 HEAD ASSEMBLY **99.00**
Complete power unit (Includes Item K — 24C Ram). Fits all frames. (Wt. 8 lbs.)

B — No. 101 SMALL FRAME **15.84**
Reach 16". Gap 13½". (Wt. 6½ lbs.)

C — No. 130D 25' AIR HOSE **7.92**
Special 5/16" I.D. with Fittings. (Wt. 4 lbs.)

D — No. 101A LARGE FRAME **15.84**
Reach 24". Gap 19". (Wt. 9½ lbs.)

E — No. 163 CAN OF LIGHT OIL ..... **.39**
Always use light oil for lubrication. (Wt. 6 oz.)

F — No. 7 ROUND DOLLY **3.96**
1 3/16" Diam. 6" Radius. (Wt. 8 oz.)

G — No. 8 ROUND DOLLY **3.96**
1¼" Diam. 6" Radius (Wt. 6 oz.)

H — No. 9 BEVELED DOLLY **3.96**
1⅛" Diam. 3" Radius. ¾" Face. (Wt. 4 oz.)

I — No. 10 RECTANGULAR DOLLY .. **3.96**
1⅛" x 2½". (Wt. 12 oz.)

J — No. 12 MUSHROOM DOLLY **3.96**
1 3/16" Diam. 12". Radius. (Wt. 4 oz.)

K — No. 24C Ram **6.99**
1 3/16" Diam. Head (Wt. 8 oz.)

L — 101E DEEP SKIRT FRAME **15.84**
Reach 20". Gap 23½". (Wt. 11 lbs.)

M — No. 151C POWER CHISEL **9.46**
For quickly cutting panels, turret tops, etc. Cuts a smooth straight edge ready for welding (Wt. 12 oz.)
No. 152 Extra Blade with Rivet. (Wt. 1 oz.) **1.43**

N — No. 171C GOO SCRAPER **9.46**
For removing goo, deadening material, and road tar. Not necessary to heat the metal — the biggest time saving tool you can own. (Wt. 12 oz.)
No. 172 Extra Blade with Rivet. (Wt. 1 oz.) **1.43**

O — No. 181C REVERSE CURVE RAM **9.46**
A special rounded ram for reverse curves. (Wt. 8 oz.)

P — No. 183C LARGE HEAD RAM **8.91**
2" Diam. Head for flat work. (Wt. 10 oz.)

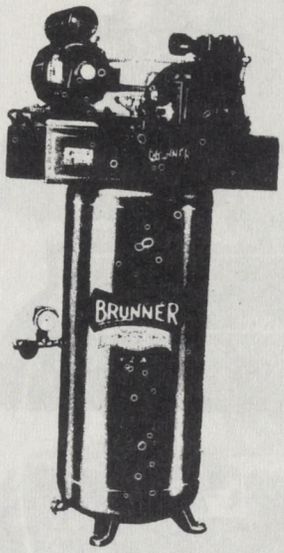
Q — No. 101G CLOSE QUARTERS FRAME **15.84**
Reach 22". Gap 15". (Wt. 8½ lbs.)

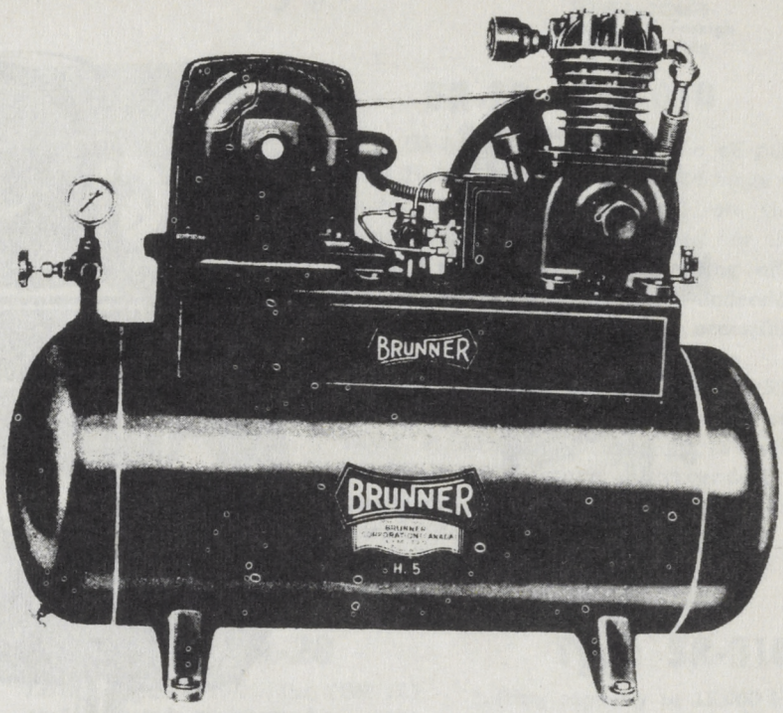
R — No. 101B TURRET TOP FRAME .. **15.84**
Reach 35½". Gap 17½". (Wt. 13 lbs.)
We recommend that a No. 121 Foot Control be used with this frame.

S — No. 121 FOOT CONTROL **10.89**
(With 7' hose.) (Wt. 4 lbs.)
For greater ease in operation we recommend the Foot Control be used with the Turret Top Frame, Power Chisel, or Goo Scraper.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

AIR COMPRESSORS
SINGLE STAGE OUTFITS





DESCRIPTION

BRUNNER Single Stage Air Compressor Outfits are extremely quiet and efficient and as will be noted, are available in all sizes from the small unit for tire inflating which operates from the electric light socket, to the largest sizes up to and including 7½ H.P.

Standard equipment includes: Two cylinder compressor with fan type fly wheel; copper aftercooler; Motor; Pressure gauge; Shut off line valve; Check valve; Safety valve; Automatic unloader controller; V-belt drive; 150 lb. working pressure tank; Intake muffler and air filter; Oil gauge; Tank drain cock.

Automatic electric controller is set to maintain a constant tank pressure between 125 and 150 lbs. unless otherwise specified.

SPECIFICATIONS

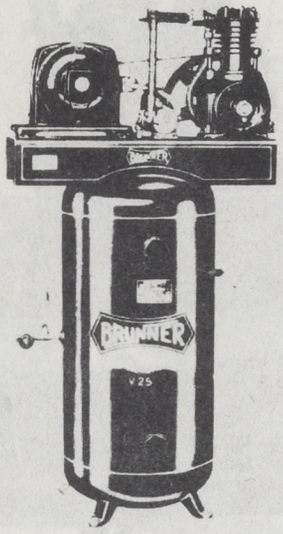
Model Number	Model Comp.	No. Cyl.	Bore and Stroke	Comp. R.P.M.	Cu. Ft. Displ.	Motor H.P.	No. of Belts	Tank Size Gals.	Shipping Weight	Dimensions		
										Height	Length	Width
H-3	A650	2	2½ x 1¾	400	4.3	¾	2	35	380 lbs.	36½"	42"	19"
H-4	A650	2	2½ x 1¾	575	5.8	1	2	30	350	35"	50"	19"
H-5	A2000	2	3¼ x 2¼	400	8.6	1½	2	60	595 lbs.	42½"	48"	22"
H-6	A2000	2	3¼ x 2¼	545	11.7	2	2	60	600 lbs.	42½"	48"	22"
H-7	A5000	4	3¼ x 2¼	330	14.2	3	3	80	764 lbs.	45"	60"	22"
H-8	A5000	4	3¼ x 2¼	535	23.	5	4	80	800 lbs.	45"	60"	22"

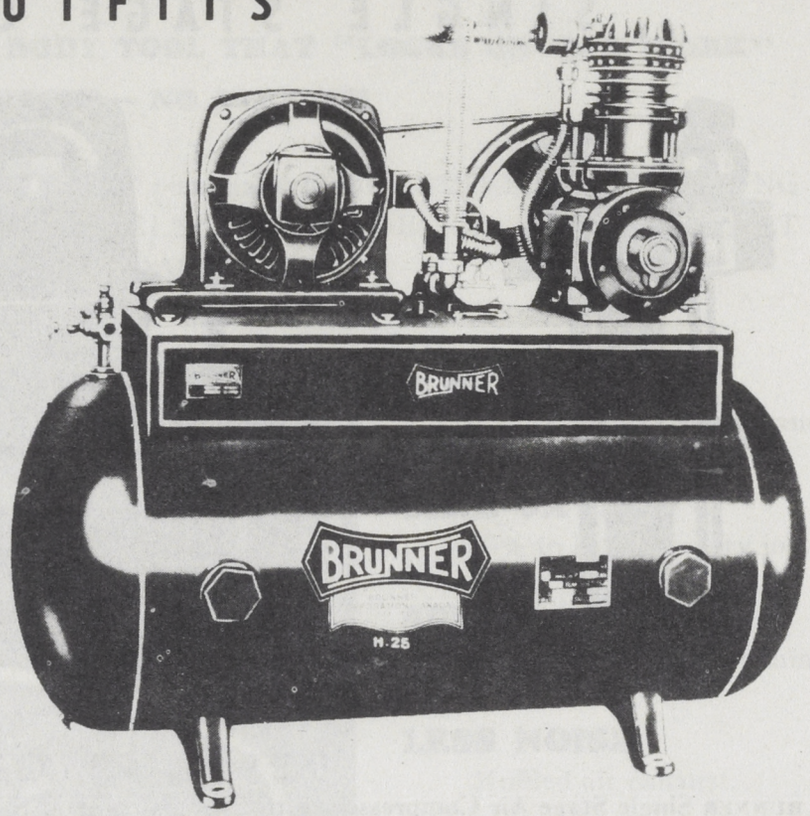
PRICE LIST

Model	60 Cycle S Phase	60 Cycle 3 Phase	Model	60 Cycle S Phase	60 Cycle 3 Phase
H-3	$363.00	$352.00	H-6	$588.50	$522.50
H-4	412.50	396.00	H-7	687.50	566.50
H-5	517.00	481.80	H-8	990.00	775.50

AIR COMPRESSORS

TWO STAGE OUTFITS





DESCRIPTION

Standard equipment includes: Balanced two stage compressor with fan type flywheel; copper aftercooler and intercooler; Motor; Pressure gauge; Shut off line valve; Check valve; Safety valve; Automatic unloader controller; V-belts; Government Approved Tank; Intake muffler and air filter; Oil gauge; Tank drain cock.

Automatic controller is set to maintain a tank pressure between 150 and 175 lbs. unless otherwise specified.

BRUNNER Two Stage Automatic Outfits are available in all sizes from ¾ to 5 H.P. inclusive. All of these models are equipped with specially designed Brunner valves for quiet and efficient operation.

These outfits are recommended where pressures above 150 lbs. to the square inch are desired and by effective intercooling and proper design will operate at these high pressures without undue heat and with a minimum of carbonization.

SPECIFICATIONS

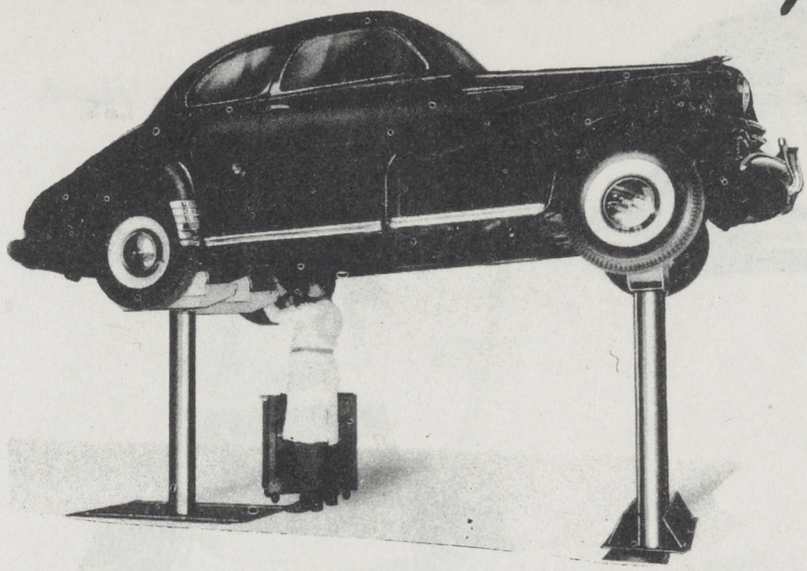
Model Number	Model Comp.	L.P. Cylinder	H.P. Cylinder	Compressor R.P.M.	Cu. Ft. Displ.	Motor Size H.P.	No. of Belts	Tank Size Gals.	Max. Working Press. lbs.	Shipping Weight	Dimensions			Boxed for Export Cu. Ft.
											Height	Length	Width	
H-25	212	3½x3	1 13/16x3	410	6.8	1½	2	65	200	580 lbs.	44"	48"	23"	41
H-29	212	3½x3	1 13/16x3	545	9.1	2	2	65	200	600 lbs.	4o"	48"	23"	53
H-30	414	4½x4	2¼x4	375	13.7	3	3	80	200	775 lbs.	46"	60"	23"	56
H-31	414	4½x4	2¼x4	600	22.1	5	4	80	200	825 lbs.	46"	60"	23"	56

PRICE LIST

Model	60 Cycle S Phase	60 Cycle 3 Phase	Model	60 Cycle S Phase	60 Cycle 3 Phase
H-29	$630.30	$554.40	H-30	$764.50	$649.00
H-25	521.40	480.70	H-31		737.00

GLOBE 2-POST *Universal Auto* HOIST

U.S. Patents
2423954—2424673
Other U.S. & Foreign
Patents Pending



SR-28 • SR-810

The Globe 2-Post Hoist is the all-purpose Hoist . . . for the full, wide range of motor service. When raised on this Hoist, the vehicle is positioned for the greatest convenience and working efficiency of the mechanic . . . the underside parts of the car are completely accessible for easy removal and replacement . . . and because from 30 to 50% MORE WORK is turned out on a Globe 2-Post Hoist, it means that from 30 to 50% MORE PROFITS come to the car dealer, garage or service station that uses this ultra-modern Hoist.

WHEELBASE RANGES AND LIFTING CAPACITIES

Tables of Plunger Settings for Globe 2-Post Hoists

Type	Post Centers	Will handle wheelbase range of:
SR-28	127½"	100" to 152"
	135½"	108" to 160"
	141½"	114" to 166"
SR-810	145½"	112" to 176"
	147½"	114" to 178"
	149½"	116" to 180"

SR-28 Net Price: $796.00

SR-810 Net Price: $996.00

Type SR-28

Lifting capacity 10,000 lbs. (SR-28) at 150 pounds maintained air pressure. Accommodates a range of wheelbases on passenger cars from 108" to 160" with usual separation of cylinders of 135½".

POWER CYLINDERS

Two 8½" diameter (SR-28), full hydraulic, surface packed plungers provide lifting power. Smooth raising and lowering, even with eccentric loads, is insured by Globe's wide-spaced bearing principle: The movable bearing is attached to bottom of the plunger; another wide bearing is fixed at top of the cylinder.

Type SR-810

Lifting capacity to 15,000 lbs. (SR-810) at 150 pounds maintained air pressure. This type accommodates wheelbases of passenger cars and light trucks from 114" to 178" with usual separation of cylinders at 147½".

POWER CYLINDERS

The front plunger of 8½" diameter and the rear plunger of 10⅝", are full hydraulic, surface packed type, and provide the lifting power for this model. Globe's load compensating lower bearing permits easy handling of off-center loads.

GLOBE *FRAME-KONTACT* HOIST

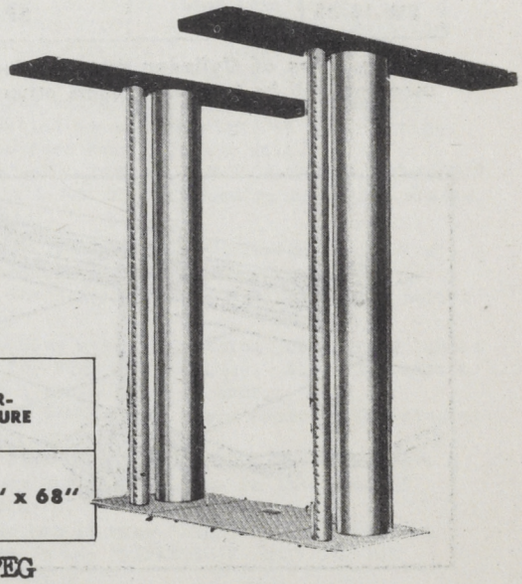
THE NEW F27

- ▼ **Classification: 2-Post**
- ▼ **Lifting Capacity: 8,000 lbs.**
- ▼ **Wheelbase Accommodation: All passenger cars.**

Net Price: $820.00

Well over 90% of post-war automobiles can be lifted on the Frame-Kontact Hoist simply by driving the car over the Hoist, wheels into front wheel wells, and raising the car. Adjustment operations are greatly reduced. Wheelbase problems with passenger cars are eliminated. Handles all makes of cars.

Compact, low-cost installation requires a minimum number of hydraulic connections. Truly a great, new Globe Hoist!



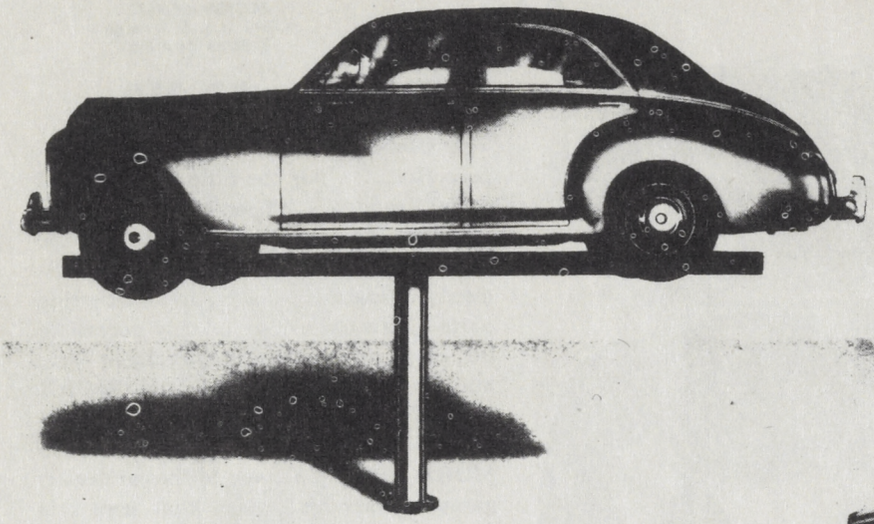
ORDER DESIGNATION	CYLINDERS					WHEELBASE ACCOMMODATION	SUPER-STRUCTURE
	TYPE	DIAMETER Inches	STROKE Inches	DISPL. Gallons	CONTROL		
F-27	Full Hyd. Car Washg.	7½"	70"	26.7	A-3 Modified	All Passenger Cars	1½" x 10" x 68"

ALL PRICES F.O.B. WINNIPEG
PLUS FREIGHT DIFFERENTIAL FOR SASKATCHEWAN AND ALBERTA DELIVERY

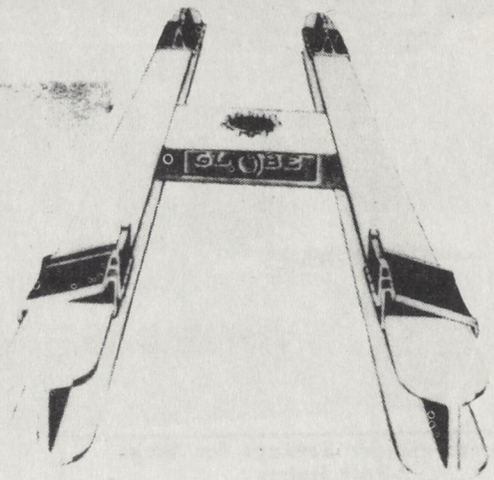
D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

GLOBE *TYPE* FW-10
SINGLE POST FREE WHEEL AUTO HOIST



CAPACITY 8,000 LBS.



IDEAL FOR SERVICE WORK

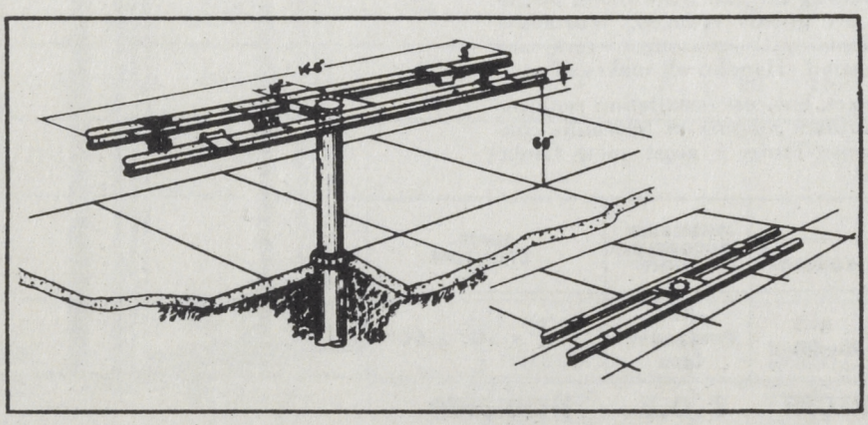
World's most popular and widely used all-purpose single post Hoist. Used for all service and maintenance work. RAILS—174" long, heavy 18.9-lb. steel; 5" H-beams with rounded ends. BOLSTER—Welded structural steel construction, machined to fit plunger and attached to plunger by heavy bolts. JACKS—Four chassis support jacks and one jack hook are standard equipment; Jacks accommodate both knee-action and older type front axle; hinged to eliminate need for removal from rails. LIFTING HEIGHT—60" (See below for Specifications; **Net Price: $480.00 F.O.B. Winnipeg. Plus Freight differential for Saskatchewan and Alberta delivery**

SPECIFICATIONS

8,000 Lbs. Capacity at 150 P.S.I. Maintained Air Pressure

TYPE	PISTON DIAMETER	TYPE CYLINDER	CONTROLS (SEE PAGE 13) AIR-OIL	ELECTRIC
FW-10-AP	10⅛"	PS-SH Piston Seal Semi-Hydraulic	A-1	Not Recommended
FW-10-BP	10⅛"	PS-FH Piston Seal Full Hydraulic	A-3	EA
FW-10-AS	10⅝"	SP-SH Surface Packed Semi-Hydraulic	A-2	Not Recommended
FW-10-BS	10⅝"	SP-FH Surface Packed Full Hydraulic	A-3	EA

Specify Type of Cylinder When Ordering. Piston Seal type with Flued Holes and Safety Bar is most generally used and will be furnished unless otherwise specified.





FREE WHEEL CHASSIS SUPPORTS

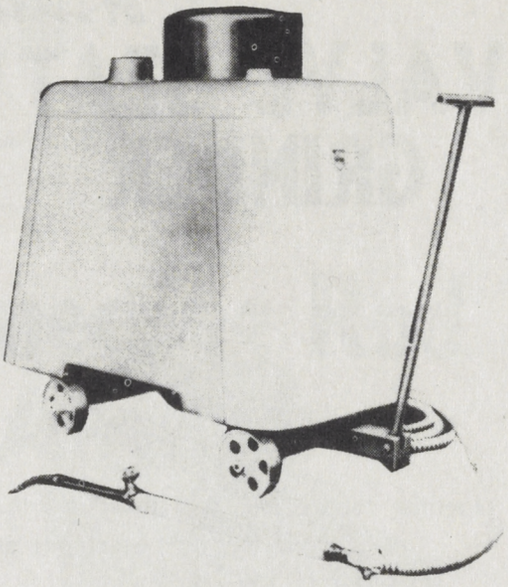
Two front type jacks, No. 127; two rear type, No. 128 and 4-ft. jack hook supplied with Hoist.



WE SPECIALIZE IN SMITH WELDING TORCHES

HYPRESSURE Jenny

Model J.O. Steam Cleaner



SPECIFICATIONS

Model JO is recommended for all automotive, industrial and farm cleaning applications--cleaning engines and chassis of passenger cars and trucks, floors, walls, windows, and building exteriors; production, road and farm machinery; miscellaneous farm uses; etc. The machine operates at 80 to 120 pounds normal operating pressure and 90 gallons per hour water capacity. Where powerful flushing and rinsing action and extra water capacity is essential to maximum cleaning results, the ADJUSTA-BLAST GUN (optional equipment) gives HYPRESSURE JENNY super-capacity up to 480 gallons per hour.

FEATURES

NOZZLE CONTROL--Saves fuel, compound, and operator's time. Gives operator complete control of steam spray generation right at the cleaning job.
CONTROL PANEL--Full view. All controls mounted on single steel panel.
PORTABILITY--Large semi-steel wheels and steering tongue afford easy portability and maximum utility.
NON-CLOGGING HEATING COILS--Internal combustion, concentric-coil type for highest overall efficiency.
PRESSURE-ATOMIZING OIL BURNER--With water-jacketed steel combustion chamber and non-carbonizing burner jet.
ELECTRIC SPARK IGNITION--Continuous and automatic.
TROUBLE FREE WATER PUMP--Open plunger type, with non-sticking check valves and life-long lubricated bearings.
TROUBLE FREE FUEL PUMP--Open plunger type. Pumps dirty gritty oil without loss of capacity or sticking. Life-long grease sealed bearings.
CONTINUOUS-DUTY ELECTRIC MOTOR--Long hour type, fractional H.P., 110 or 220 volts, 60 cycle, single phase A.C.

COOL-GRIP CLEANING GUN--With round nozzle and 2" and 4" flat nozzles.
RUBBER COVERED DROP CORD-- (10 ft.) with plug-in connector.

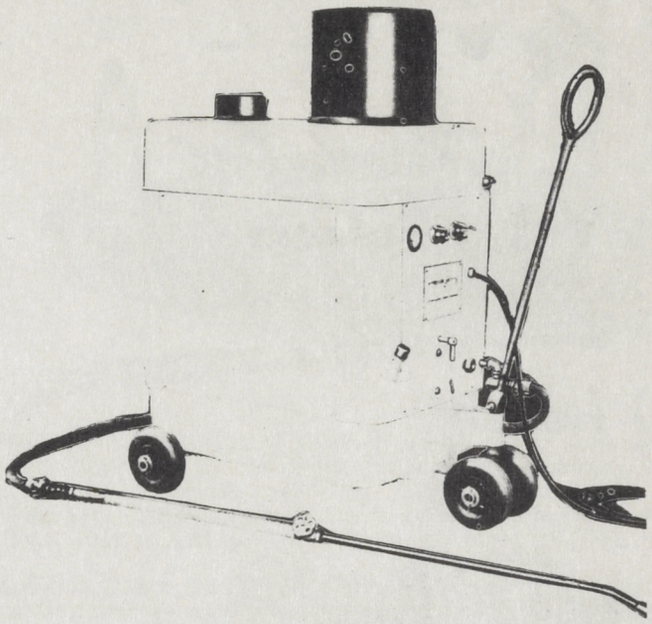
MODEL JO "DE LUXE" --- Complete portable type with panel control board assembly. Nozzle controlled spray, machinery cover and stack.

NET PRICE: $846.45

ADJUSTA-BLAST GUN --- Complete with one section extra quality, light weight flexible steam hose, with couplings; one adapter fitting for connecting gun to HYPRESSURE JENNY.

NET PRICE: $52.80

Service Master Steam Cleaner



SPECIFICATIONS

The SERVICE MASTER HYPRESSURE JENNY delivers 45 gallons of boiling-hot cleaning spray per hour--the ideal amount for most cleaning jobs. Extra powerful flushing and rinsing action up to 240 gallons per hour may be had by using the ADJUSTA-BLAST GUN.

It's a real space saver! Requiring only 27" x 37" of floor space, the SERVICE MASTER can be fitted in most any where.

FEATURES

SCIENTIFIC UPDRAFT COMBUSTION CHAMBER--with full stack area eliminates possibility of trapping combustible gases.
INSTANT STARTING--Continuous automatic electric spark ignition, and pressure-atomizing oil burner, start SERVICE MASTER instantly at the flick of a switch.
PERFECTED NON-CLOGGING VAPOR-GENERATOR HEATING COIL--Not a steam boiler. As simple and safe as a home instantaneous water heater. Outer coil forms permanent natural water jacket, eliminating need for short-lived insulation.
NOZZLE CONTROL--HYPRESSURE JENNY'S Nozzle Control saves time fuel, compound, water and electricity. Complete control system shuts of fuel, water pump, and burner automatically whenever operator closes valve on cleaning gun. Operator can stop and start machine as needed, right at the cleaning job which might be 100 feet away from the unit.
PORTABLE OR STATIONARY--You can roll SERVICE MASTER HYPRESSURE JENNY to the job on it's own 6" cushioned rubber-tired wheels, or 7" semi-steel wheels.

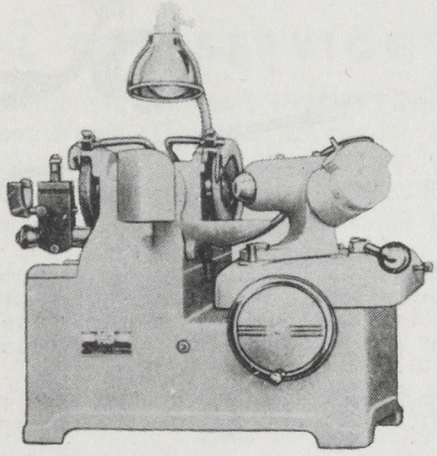
SIMPLIFIED FUEL AND SOLUTION PUMPS--Trouble-free. positive displacement pumps, measure right amounts of water and cleaning solution to the heating coil. Minimum moving parts. No oiling required.
ECONOMICAL OPERATION--Does average cleaning jobs for as low as thirty cents an hour for fuel and compound. Electric current consumption as low as 1 to 1½ cents an hour.
LARGE FUEL AND SOLUTION TANKS--Give ample capacity for several hours of operation without refilling.
INSTANT STEAMING--SERVICE MASTER HYPRESSURE JENNY delivers a full-powered blast from the cleaning gun in less than 90 seconds from a cold start.
No other Steam Cleaner has so many "big-unit" features, at such a low price. That's why "HYPRESSURE JENNY SERVICE MASTER" is your best "buy".
NET PRICE COMPLETE $645.00

K. O. LEE
AUTOMOTIVE MAINTENANCE EQUIPMENT



"Knock-Out" Valve Refacer

- Big—Rugged—Accurate—Fast
- Positive adjustments make operation faster.
- Machine tool designs means greater accuracy.
- Rugged construction gives longer life.



This improved "Knock-Out" Wet Valve Refacer is designed, from the heavier base to the "V" belt drive, to grind valves better, faster, for a longer time. Designed like a machine tool throughout, the following features prove its superiority.

- Hardened, ground "V" shaped adjustable steel ways for the table traverse insure smooth operation.
- Worm gear driven work-head with large bronze bushings in spindle eliminate vibration.
- Proven double grip collet holds valve stem on bearing surface so valve face must be concentric with stem for perfect seating.
- Fast acting hand wheel tightens or loosens valve with a flip of the wrist.
- Snap-lock stop instantly set for different valve lengths.
- Positive stop for setting angles from 15° to 90° means more accurate grinding.
- Instant setting of table traverse arm in position to suit operator.
- Diamond held in work-head for accurate, smooth dressing of wheel.
- "V" belt drive on ball bearing mounted wheel spindle insures perfect grinding.
- New tension lock on butt grinder simplifies holding valves.
- Micrometer adjustment and simple, accurate depth gauge speeds accurate butt grinding.
- Coolant supplied to both wheels by pump with separate motor.
- Settling tank easily removed for cleaning.

STANDARD EQUIPMENT

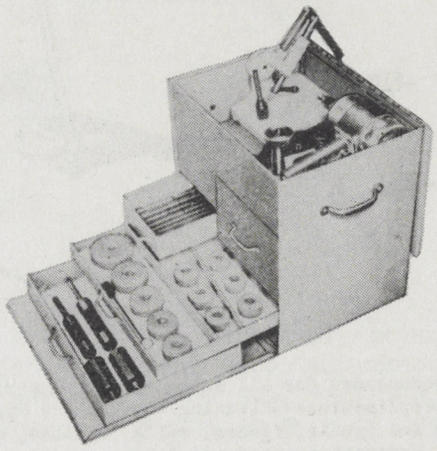
1 A173 Diamond Nib
1 K-7 Water Tank Cover
1 K-9 Splash Guard
1 K-32 Water Pump Assembly
1 K-34 45° Diamond Nib Holder
1 K-36 Micrometer Butt Grinding Attachment
1 K-36D Depth Gauge for Ford Valves
1 K-43D Double-end Collet (9/32" to 9/16")
1 K-43E Double-end Collet (½" to 11/16")
1 OV5GH80 5"x½"x⅝" Offset Grinding Wheel
1 RV4GQKMB 4"x½"x2¼" Metal Back Grinding Wheel
Net Wt. 210 lbs. Shipping Wt. 255 lbs.

EXTRA EQUIPMENT

K-35 90° Diamond Nib Holder
K-43C Double-end Collet (¼" to ⅜") with K43P Spacer Sleeve
K-50 Rocker Arm Grinding Attachment with one bushing (for Chevrolet rocker arm unless otherwise specified)

		Net Price
K103A	Valve Refacer Complete: 110 Volt., 60 Cycle, A.C. Motor	$491.70
K103AU	Valve Refacer Complete: Universal Motor	$530.20

Utility VALVE SEAT GRINDER



The Tool With 101 Uses

Valve seat grinding—carbon removing—tool post grinding—abrasive disc grinding—abrasive drum grinding—miscellaneous hand grinding.

Knock-Out Universal Valve Seat Grinders are scientifically designed with correct weight, correct balance to make them simple to set up—efficient—easy to operate.

Model P300 Basic Valve Seat Grinder Set. This basic set is designed to service only those motors the purchaser desires.

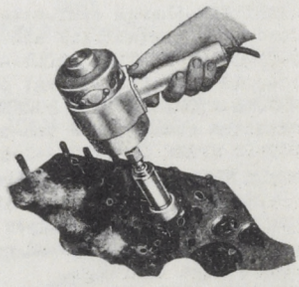
Model P300 Net Price: $132.00

Model P301 Junior Valve Seat Grinder Set. This set is designed to service most makes of cars, small trucks, and tractors.

Model P301 Net Price: $159.50

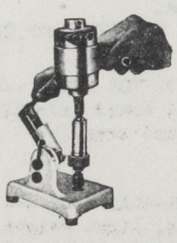
Model P302 Universal Valve Seat Grinder Set. This set is designed to service all cars, trucks and tractors. An operator may start with the basic valve seat grinder set and by adding stones, pilots and other accessories as the need arises, build the basic set into a complete universal set.

Model P302 Net Price: $198.00



KNOCK-OUT WHEEL DRESSERS

The K-O Wheel Dresser, mounted on non-skid rubber pad, is quick and simple to operate. The plunger and diamond are held by constant friction and require no locks or adjustment for the life of the tool. The plunger is protected from emery dust by dust shields at both ends. Swivel bevel is graduated from 0° to 90°



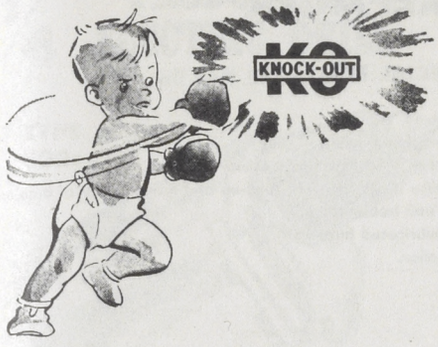
GENERAL PURPOSE WHEELS

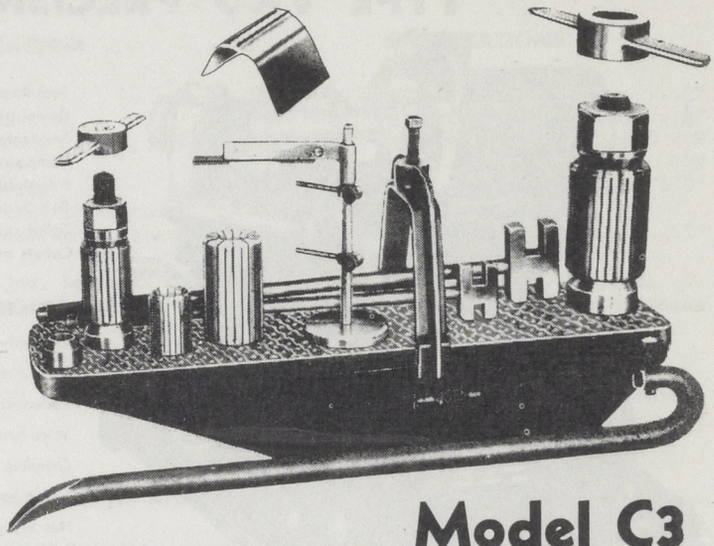
No.	Diameter	No.	Diameter	No.	Diameter
P228*	1⅛"	P239	1¾"	P251	2½"
P231	1¼"	P241	1⅞"	P255	2¾"
P233	1⅜"	P243	2 "	P259	3 "
P235	1½"	P245	2⅛"	P261	3¼"
P237	1⅝"	P247	2¼"	P263	3½"

*P228 Wheel has 9/16"—16 thd. All other K-O Wheels have 11/16"—16 thd. P190B Adapter Bushing (11/16"—16 to 9/16"—16) furnished no charge.

WE ARE SPECIALISTS IN BRAKE DRUM WORK

K. O. LEE
AUTOMOTIVE MAINTENANCE EQUIPMENT





Connecting Rod Aligners

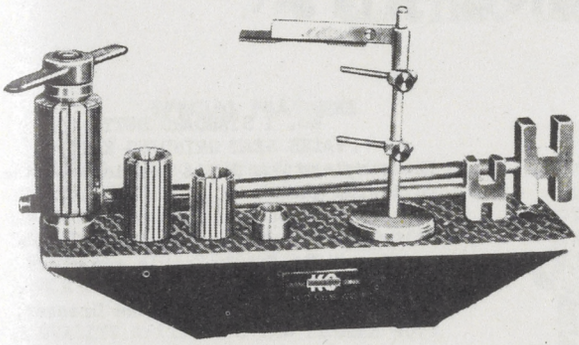
Check and correct band, twist and offset without removing rod assembly from the aligner.

Model C3

MODEL C3 UNIVERSAL ROD ALIGNER. For cars, trucks and tractors—capacity 1½" to 4¼". Equipped with four expanding sleeves, two arbors with cones, checking gauge with indicator, three bending bars, one bending clamp, large base (7"x27"x5"—weight 90 lbs.). Net weight 135 lbs., shipping weight 162 lbs.

Knock-Out Connecting Rod Aligners are universal tools. Four expanding sleeves used with these units will accommodate most all rods from the smallest used in automobiles to the largest used in tractors. These sleeves firmly and quickly chuck any standard, oversize, or undersize rods, which can be checked and straightened in one operation. The arbor is so sturdy that bending or twisting of rods with a bar does not affect it.
Extreme accuracy is maintained whether checking the rod alone or assembled with the piston. The expanding sleeve has a bearing surface in every direction, eliminating the use of a large number of parts.

Net Price: $255.75



Model C2

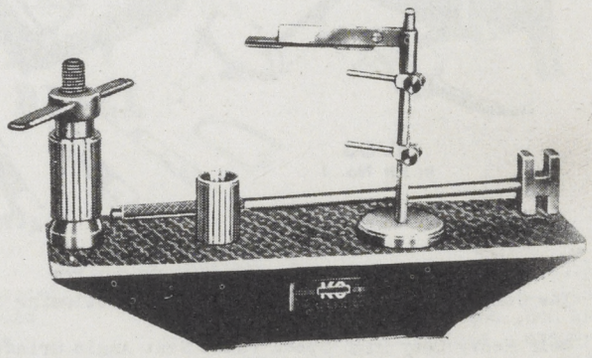
MODEL C2 MEDIUM ROD ALIGNER. For cars, trucks and tractors—capacity 1½" to 3". Includes three expanding sleeves, checking gauge with indicator, two bending bars, small base (5⅛"x21"x3¾"—weight 35 lbs.). Net weight 51 lbs., shipping weight 55 lbs.

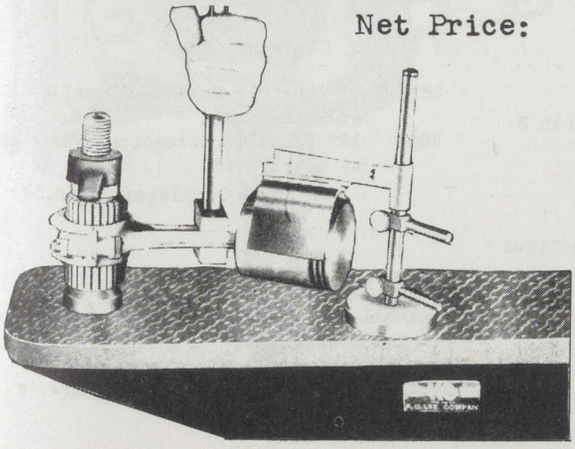
Net Price: $140.25

Model C1

MODEL C1 JUNIOR ROD ALIGNER. For cars and trucks—capacity 1½" to 2⅜". Includes two expanding sleeves, checking gauge with indicator, one bending bar, and a small base (5⅛"x21"x3¾"—weight 35 lbs.). Net weight 42 lbs., shipping weight 46 lbs.

Net Price: $111.38





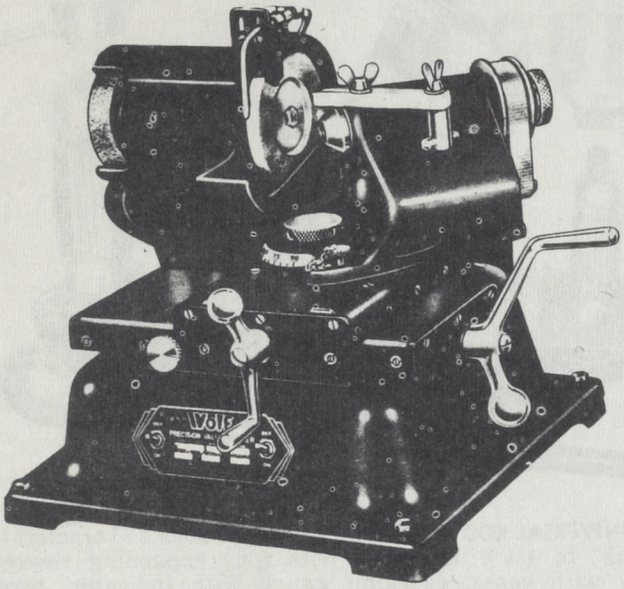
Check and Correct Rod

Check and Correct Rods

Illustration at left shows operator checking rod with indicator as he corrects its twist. While the piston skirt is turned against the side of the rod, the needle will point either above or below center, indicating the direction the rod is to be bent to correct its twist.

WOLF ELECTRIC TOOLS

TYPE VR5 PRECISION VALVE REFACER



SPECIAL FEATURES

Tool Room Accuracy.
Dowel-pin anchoring for strict angle location.
Separate Motors for grinding wheel and Valve-holding collet.
Compound slide rest with large "Vees" for rigidity in feeding and traversing.
Adjustable facing strips on both feed and traverse slides for wear take-up and maintenance of accuracy
Grinding wheel spindle mounted on adjustable ball bearings.
Collet spindle mounted on large WOLFITE self-lubricated bearings.
Collets are double-end type for full gripping action.

SPECIFICATIONS

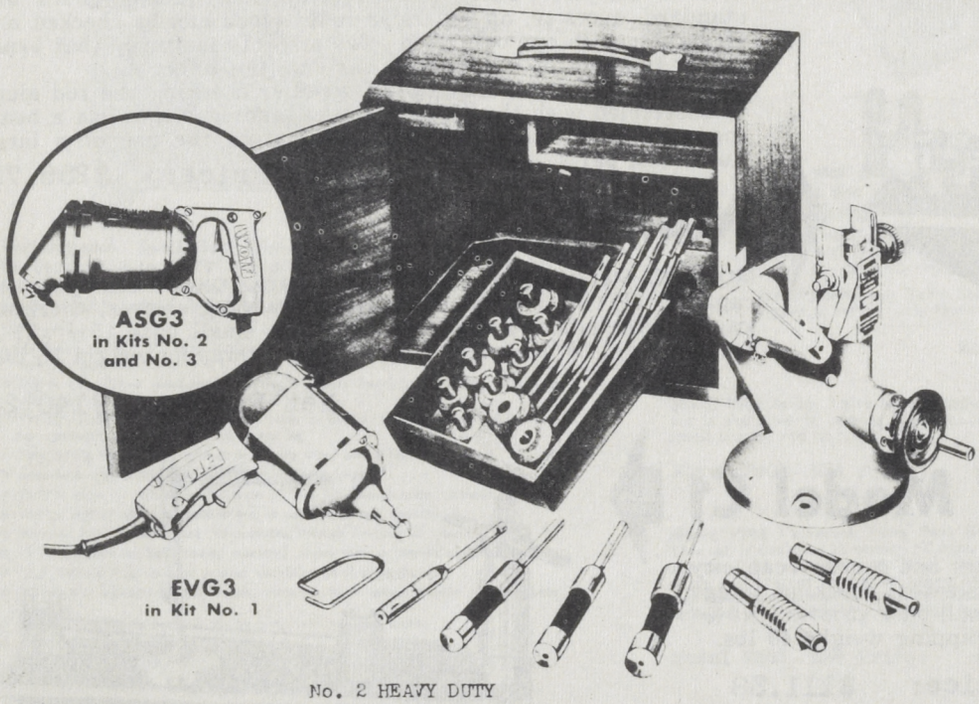
Capacity—Valve Heads	to 4" dia.
Valve stems	¼" to 1 1/16"
Recessed grinding wheel	5" x ½" x ¾"
Wire brush	4"
Grinding Spindle Speed, light	4000 RPM
Collet Spindle, light	450 RPM
Net Weight	141 lbs
Gross Weight	182 lbs

Universal Motors, AC/DC, 25-60 cycle, single phase, 110 volt, Other voltages on request.

Net Price Complete: $307.50

Each machine supplied complete with starting switches, 3-core cable and plug, driving belts, one 5" recessed grinding wheel, one 4" wire brush, one diamond wheel dresser, four collets (¼" to 3/64", 3/16" to 9/16", ½" to 1 1/16"), distance sleeve for small collet, 7/16" spanner, "C" spanner, claw screwdriver, two pin keys, tin of soluble oil, spare pair of carbon brushes for each motor.

VALVE SEAT GRINDING KITS



No. 2 HEAVY DUTY
VALVE SEAT GRINDING KIT

The Complete No. 2 Kit consists of the Following items:-

Wolf Heavy Duty High Speed Valve Seat Angle Grinder, Type ASG3, complete with 3 core cable and spare pair carbon brushes.

Wolf Precision Diamond Stone Dresser, Type PD3.

2	6721	Stone Sleeve
1	4391	Coarse Stone Double Sided
1	4394	Coarse Stone Double Sided
1	4397	Coarse Stone Double Sided
1	4400	Coarse Stone Double Sided
1	4393	Finishing Stone Double Sided
1	4396	Finishing Stone Double Sided
1	4399	Finishing Stone Double Sided
1	4402	Finishing Stone Double Sided
1	678	Expanding Pilot
1	679	Expanding Pilot
1	680	Expanding Pilot
1	682	Expanding Pilot
1	1715	Plug Pilot
1		Pilot Tommy Bar
1		Carrying Case

Net Price Complete: $165.00

No. 1 STANDARD DUTY
VALVE SEAT GRINDING KIT

The complete No. 1 Kit consists of the following items:

Wolf High Speed Grinder, Type EVG3, complete with 3-core cable and spare pair carbon brushes.
Wolf Precision Diamond Stone Dresser, Type PD3.

2	6721	Stone Sleeve
1	4391	Coarse Stone Double Sided
1	4394	Coarse Stone Double Sided
1	4397	Coarse Stone Double Sided
1	4400	Coarse Stone Double Sided
1	4393	Finishing Stone Double Sided
1	4396	Finishing Stone Double Sided
1	4399	Finishing Stone Double Sided
1	4402	Finishing Stone Double Sided
1	678	Expanding Pilot
1	679	Expanding Pilot
1	680	Expanding Pilot
1	682	Expanding Pilot
1	1715	Plug Pilot
1		Pilot Tommy Bar
1		Carrying Case

2511	9" Flexible Extension available at extra cost.
7048	12" Flexible Extension available at extra cost.

Net Price Complete: $146.50

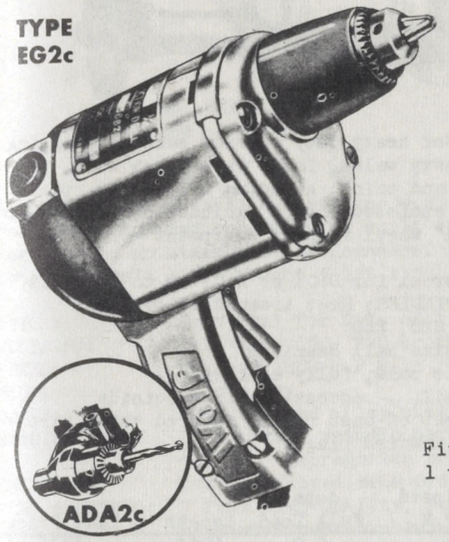
We are in a position to supply you with replacement parts and further accessories for these machines.
If you are interested, please do not hesitate to write for a Manufacturer's Catalogue.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

WOLF ELECTRIC TOOLS

1/4" PRODUCTION ELECTRIC DRILL
(all ball bearing)

TYPE EG2c



SPECIAL FEATURES

CASTINGS.....Di-Alloy
ARMATURE.....Lectro-balanced
FIELD.....Tension-wound
INSULATION....Quadri-type
FAN.....High Velocity
BEARINGS.....Ball Bearings throughout
GEARS.....Chrome-Nickel-Moly, heat-
CHUCK.....treated
CHUCK.....Jacobs 3-jaw, hardened body complete with key, chuck shroud.

COMPARE this lightweight production Drill with HIGHER-PRICED TOOLS of the same RATED SIZE

SPECIFICATIONS

Drilling Capacity in Steel.....1/4"
Drilling Capacity in Wood.....1/2"
Spindle Speed running light....2800 RPM
Spindle Speed on full load.....1400 RPM
Overall length.....7 3/8"
Centre of Spindle to outer casing.....1"

Universal Motor AC/DC, 25-60 cycle, single phase, 110 Volt. Other voltages on request.

Each machine supplied complete with starting switch, Jacobs Chuch, 3-core cable, and spare pair of carbon brushes.

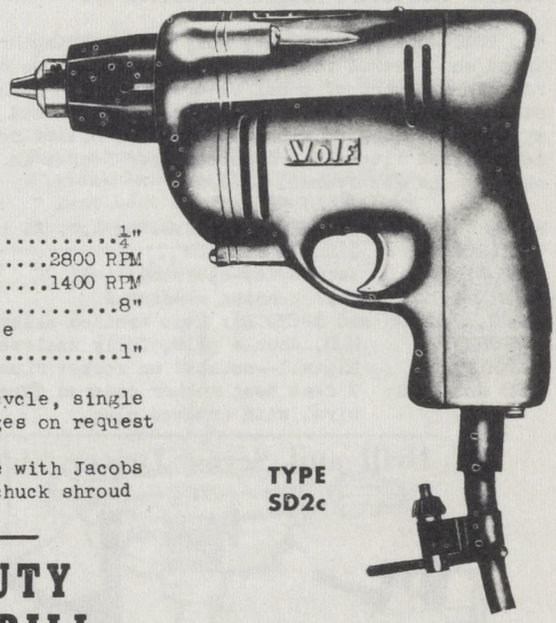
Model EG2C Net Price Complete: $43.75

ANGLE DRILLING ATTACHMENT TYPE ADA2c

Fits easily and quickly on EG2C Spindle. Rotates to any position. Bevel gear drive 1 to 1 ratio. Length from Chuck tip to back of gear box . . . 3 3/8"

Model ADA2C Net Price Complete: $19.80

1/4" LIGHT DUTY ELECTRIC DRILL



TYPE SD2c

SPECIAL FEATURES

CASTINGS.....Precision Aluminum Alloy
INSULATION.....Quadri-type
GEARS.....Nickel Alloy
ARMATURE.....Lectro balanced
CHUCK.....Jacobs 3-jaw with key
CHUCK SHROUD.....Standard equipment

A QUALITY drill at a Low Price. Recommended for intermittent use.

Model SD2C Net Price Complete: $28.75

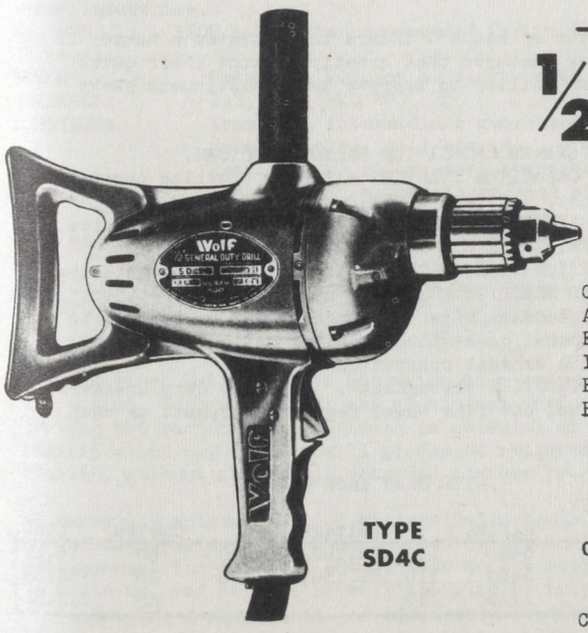
SPECIFICATIONS

Drilling Capacity in Steel.....1/4"
Spindle Speed running light.....2800 RPM
Spindle Speed on full load.....1400 RPM
Overall Length.....8"
Distance from centre of Spindle to outer casing.....1"

Universal Motor AC/DC, 25-60 cycle, single phase, 110 volt. Other voltages on request

Each machine supplied complete with Jacobs Chuck and key, 3-core cable, chuck shroud

1/2" GENERAL DUTY ELECTRIC DRILL



TYPE SD4C

SPECIAL FEATURES

CASTINGS.....Di-Alloy
ARMATURE.....Lectro-balanced
FIELD.....Tension-wound
INSULATION....Quadri-type
FAN.....High velocity
BEARINGS.....Wolfite spindle bearings:, self-aligning commutator end-bearing; deep-grooved thrust ball bearing on chuck spindle.
GEARS.....Chrome-Nickel Alloy; high-frequency hardened.
CHUCK.....Jacobs 3-jaw, hardened body, complete with key.

SPECIFICATIONS

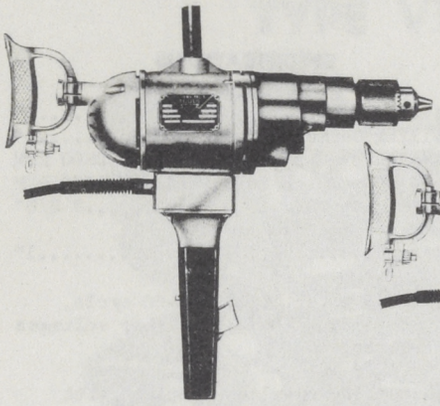
Drilling Capacity in Steel.....1/2"
Drilling Capacity in Wood.....1"
Spindle Speed running light..640 RPM
Spindle Speed on full load...475 RPM
Overall length.....13 1/16"
Distance from centre of Spindle to outer casing.....1 5/16"

Universal Motor AC/DC, 25-60 cycle, single phase, 110 volt. Other voltages on request.
Each machine supplied complete with starting switch, Jacobs chuck, tubular handle, 3-core cable, and one pair of carbon brushes and capsule of oil

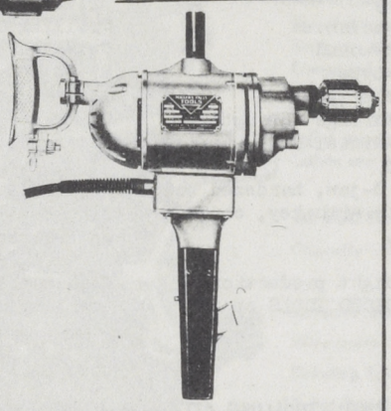
Model SD4C Net Price Complete: $53.75

MILLER FALLS ELECTRIC TOOLS

5/8, 3/4 Inch Electric Drills



No. 734C
Net Price: $154.33



No. 658B
Net Price: $134.20

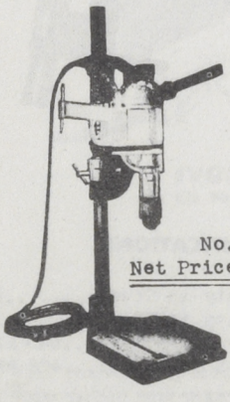
These larger capacity drills are ruggedly built for continuous service. They are heavily powered and every part is designed for the loads they must carry or transmit.

No. 658B--5/8" Heavy Duty Ball Bearing Drill. A heavy duty tool. Recommended for the toughest kind of continuous work, such as operating pipe threading machines and work of a similar character. Length Overall 19 1/4"

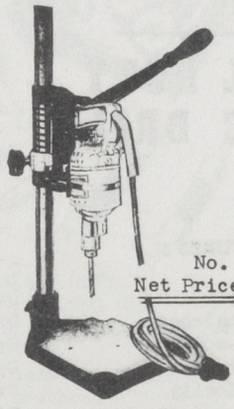
No. 734C--3/4" Extra Heavy Duty Ball Bearing Drill is designed and powered for the very heaviest types of 3/4 inch service and work of equal severity. It is recommended for such jobs as driving positive set cylinder and hones. The spindle is equipped with Timken Taper Roller Bearings and is supplied with a No. 3 Morse Taper Socket in place of a chuck. Length Overall 21 3/4"

MOTORS: Universal for D.C. or A.C. 25 to 60 cycles
VOLTAGES: 110,220 and 250
CHUCKS: Jacobs key-operated
BEARINGS: Ball bearing armatures
GEARS, PINIONS and SPINDLES: Heat treated alloy steel
SWITCHES: H.D. double pole, fully enclosed.
BRUSHES: Pigtail--mounted on rocker ring
CORD and PLUG: 7 feet best rubber covered Type S three wire. with armored plug

Drill and Screw Driver Stands



No. 1238
Net Price: $53.68



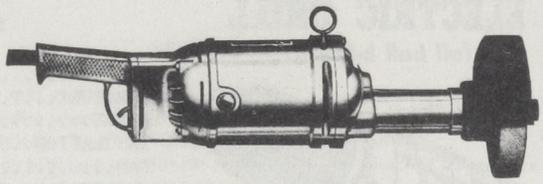
No. 1514
Net Price: $33.55

Millers Falls Portable Drills and Screw Drivers can be converted to efficient bench units by using these stands. They are made to accomodate all drills and screw drivers.
The tool is held rigidly in position in the adjustable braket, which is adjustable as to height. The long lever equipped with spring return provides ample drilling pressure or follow through for screw driving or nut running.

Model	Drills and Screw Drivers	Chuck to Table	Height Overall	Base
1238	538BA to 801A	16"	36"	10"x10"
1514	414,514C,516C,638C.11.22B	13¼"	28"	9¼"x8"

Portable Electric Grinders

with Totally Enclosed Motors

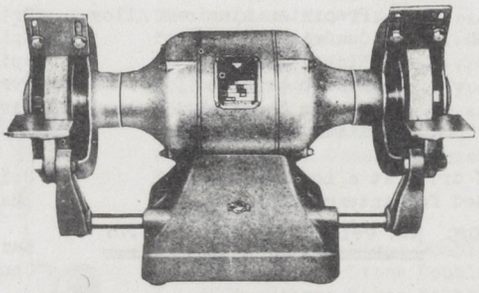


Designed throughout for heavy duty service such as snagging castings, grinding heavy welds, large wire brush work, removing rust, scale and paint, grinding off rivets, pins, bolts, etc. Totally enclosed motors exclude injurious dust and grit. One 6" x 1" wheel regular equipment

MOTORS: Universal for D.C. or A.C. 25 to 60 cycle
GEARS, PINIONS and SPINDLES: Heat treated alloy steel
VOLTAGES: 110, 220, 250
BEARINGS: Oversize ball bearings
SWITCHES: Double pole, fully enclosed
BRUSHES: Pigtail. . .accessible from outside
CORD and PLUG: 10 feet of best rubber covered three wire, with armored plug.

No.	Diam. Wheel	N.L. Speed R.P.M.	Amps. Full Load	Length	List Price
406B	6"	3700	6.0	23⅝"	$161.04
461	6"	5500	6.0	23½"	$161.04

DeLuxe
HEAVY DUTY
GRINDERS



This new line of Bench Grinders incorporates a number of sterling new features that greatly enhance their quick starting and ability to operate under continuous heavy loads.

NEW SUPER-POWERED, PRECISION BALANCED MOTORS.
EXTRA FAST CAPACITOR STARTING with low starting current requirements . . . less than 15 amperes.
CONTINUOUS INDUCTION RUN for steady, heavy duty service.
NEW OVERSIZE, LABYRINTH SEALED BALL BEARINGS.
NEW KNEE ACTION TOOL REST for straight or angle grinding.
NEW ENCLOSED WHEEL GUARDS . . . heavier for safety . . . wider to accomodate wire brush wheels and equipped with standard exhaust connections. All steel guards not supplied with exhaust connections.
STURDY CONSTRUCTION throughout . . . heavy chip breakers, one coarse and one fine wheel regular equipment on each grinder.

WITH GREY IRON GUARDS

SINGLE PHASE.

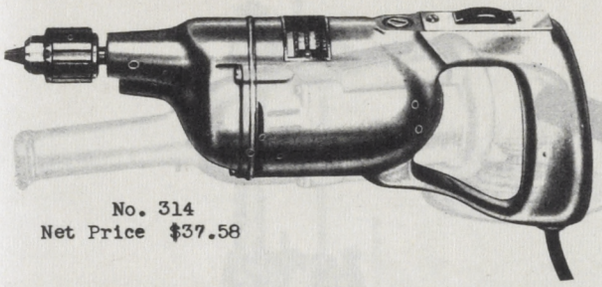
No.	H.P.	R.P.M.	Voltages	Cycles	List
76	1/3	3450	110,125,150,220,250	60	94.12
77	1/2	3450	110,125,150,220,250	60	133.58
81	1	1725	110	60	212.52

Single phase grinders are equipped with heavy duty switch and 10 feet of rubber covered cord.

WE SPECIALIZE IN STEEL CAP SCREWS

MILLER FALLS ELECTRIC TOOLS

¼ Inch Electric Drill



No. 314
Net Price $37.58

Light in weight, excellent balance and comfortable grip. Powerfully motored and sturdily built throughout to guarantee smooth, uninterrupted performance. Capacity 1/4" steel. Length overall 12". Weight 4 1/2 lbs.

MOTOR:	Universal for D.C. or A.C., 25 to 60 cycles.
VOLTAGES:	110, 125, 150, 220 or 250.
SPEED:	No Load 1800 R.P.M.
CHUCK:	Jacobs Key.
GEARS:	Heat treated alloy steel.
BEARINGS:	Ball thrust spindle bearing, all others "Oilite" impregnated bronze.
SWITCH:	Fully enclosed make and break.
CORD and PLUG:	7 feet high quality, rubber covered three wire with unbreakable plug.



New Improved

No. 220
Net Price $56.36

"DYNO-MITE"

PRODUCTION DRILL

More Power - More Production

This new, improved line of Dyno-Mite Drills has been augmented by the addition of a high torque model equipped with a 3/8" chuck nicely adapted to airplane production and many other industries.

No. 220 . . . 1600 R.P.M. is recommended for general service in steel.

MOTOR:	Universal D.C. or A.C., 25 to 60 cycles.
VOLTAGES:	115, 125, 220/230, 250
BEARINGS:	Armature, intermediate gears and spindle, grease sealed, ball bearing.
GEARS:	Heat treated alloy steel throughout.
SWITCH:	Double pole, automatic release with trigger latch.
CORD and PLUG:	Ten feet of three conductor hard service cord with plug.

1/4" Chuck, Capacity Steel, 1/4" Length Overall 8 7/8"
No. 220 Net Price: $56.36

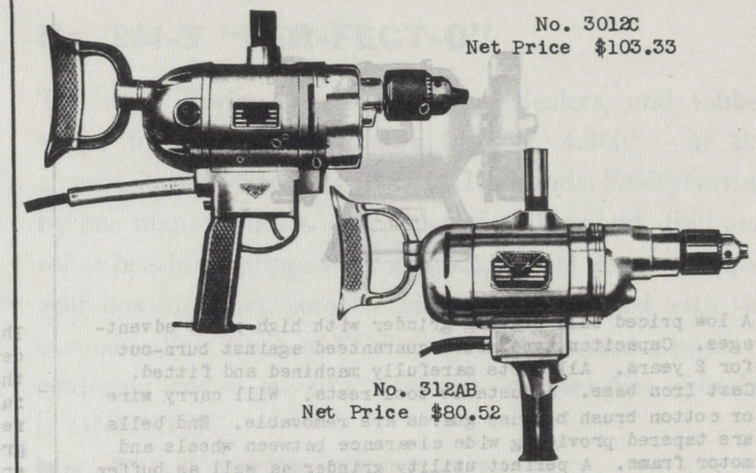
Guarantee

Every Millers Falls Tool is subjected to a searching inspection, both mechanical and electrical, before leaving the factory. Any defects in material or workmanship which may develop will gladly be replaced or repaired without charge, if returned charges prepaid.

We carry a complete stock of Millers Falls Tools and replacement parts. If you need a new machine or replacements for your old one, please do not hesitate to write us, and we will be only too glad to help you.

For unsurpassed mechanical and electrical construction, performance, dependability, and low cost maintenance, insist on MILLERS FALLS ELECTRIC TOOLS.

½ Inch Electric Drills



No. 3012C
Net Price $103.33

No. 312AB
Net Price $80.52

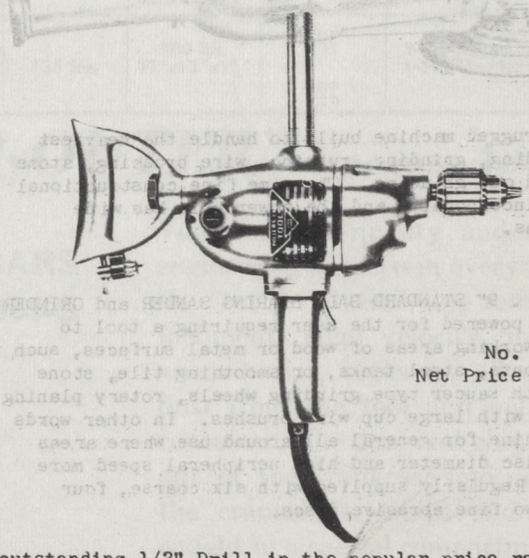
These two fine 1/2" capacity drills cover every conceivable requirement from intermittent general purpose service to the severest continuous heavy duty operation.

No. 312AB---1/2" Standard Ball Bearing Drill is very easily handled due to its light weight and excellent balance. Particularly well suited to maintenance and repair work.

No. 3012C---1/2" Heavy Duty Ball Bearing Drill has everything that a super-drill of this capacity should have: power, beautiful balance, light weight, speed and durability. Full ball bearing spindle.

MOTORS:	Universal for D.C. or A.C. 25 to 60 cycle
CHUCKS:	Jacobs key operated.
GEARS, PINIONS & SPINDLES:	Heat-treated alloy steel.
SWITCHES:	Double pole, fully enclosed.
VOLTAGES:	110, 220, and 250.
BEARINGS:	Ball bearing armatures.
BRUSHES:	Pigtail--accessible from outside.
CORD and PLUG:	7 feet best rubbered covered Type S three wire, with attachment plug.

½ Inch Electric Drill



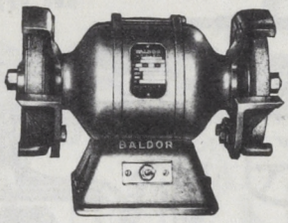
No. 712
Net Price $64.42

The outstanding 1/2" Drill in the popular price range. Powerful motor housed in streamlined aluminum body. Capacity 1/2" steel. 15 1/2" lond.

MOTOR:	Universal for D.C. or A.C. 25 to 60 cycle
VOLTAGES:	110, 125, 150, 220 or 250
SPEED:	No load 400 R.P.M.
CHUCK:	Jacobs Key
GEARS:	Heat treated alloy steel
BEARINGS:	"Oilite" impregnated armature and ball spindle and thrust bearings.
SWITCH;	Double pole enclosed.
CORD and PLUG:	7 feet of three wire, rubber covered with unbreakable plug.

MILLER FALLS ELECTRIC TOOLS

Boldor Grinder . . . 60 Series



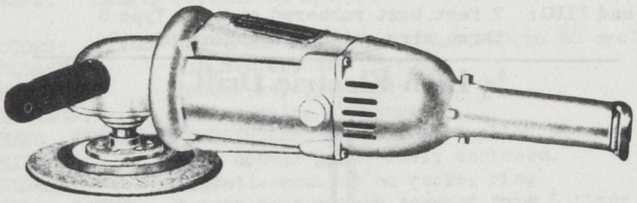
A low priced ball bearing grinder with high price advantages. Capacitor type motor guaranteed against burn-out for 2 years. All parts carefully machined and fitted. Cast Iron base. Adjustable tool rests. Will carry wire or cotton brush because guards are removable. End bells are tapered providing wide clearance between wheels and motor frame. A perfect utility grinder as well as buffer, for general purpose work. Ideally suited for garages, repair shops, maintenance departments etc.

1/4 H.P. 1 Phase 60 cycle 3400 R.P.M.
115 Or 230 Volts

TWO GRINDING WHEELS
6" x 5/8" x 1/2" . . . 36 Grit
6" x 5/8" x 1/2" . . . 60 Grit

Net Price: $47.85

Portable Disc Sanders and Grinders



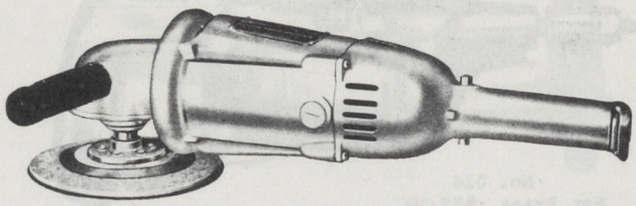
A powerful, rugged machine built to handle the heaviest types of sanding, grinding, rubbing, wire brushing, stone surfacing and cup grinding. The same fine constructional details are incorporated and the power unit has wide safety margins.

No. 990B . . . 9" STANDARD BALL BEARING SANDER and GRINDER. Designed and powered for the user requiring a tool to cover large working areas of wood or metal surfaces, such as floors, boats, steel tanks, or smoothing tile, stone and welds with saucer type grinding wheels, rotary planing and cleaning with large cup wire brushes. In other words an ideal machine for general all-around use where areas make large disc diameter and high peripheral speed more economical. Regularly supplied with six coarse, four medium and two fine abrasive discs.

MOTORS: Universal for D.C. or A.C. 25 to 60 cycle.
VOLTAGES: 110, 220 or 250 Volts.
PADS: Adjustable super-flexible pads.
GEARS, PINIONS and SPINDLES: Heat-treated chrome nickel steel.
BEARINGS: Ball bearing throughout, grease-sealed.
SWITCHES: Double pole, fully enclosed.
CORD and PLUG: 10 feet best rubber covered three wire, with unbreakable plug.

No.	Diam. Disc.	N.L. Speed R.P.M.	List Price
990B	9" Stan.	3850	$123.46

Portable Disc Sanders and Grinders



These efficient highly refined tools embody all the latest developments in disc sanders and grinders. The motors are the finest that can be produced. Every moving part is fully mounted on grease-sealed ball bearings. A special resilient, shock-absorbing coupling minimizes vibration and greatly increases the life of the tool. All injurious material is excluded by a new perfected air filter. They have power, the most effective speeds and long life.

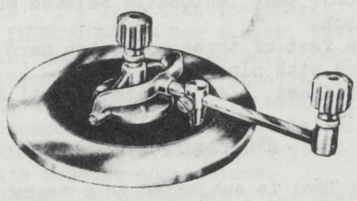
No. 775B . . . 7" STANDARD BALL BEARING SANDER AND GRINDER. Powered for tough sanding, grinding and cleaning operations requiring only intermittent service or production work of lighter character. It is adapted to smoothing concrete and cleaning concrete forms, scaling and cleaning with cup grinding wheels and cup wire brushes. A real general purpose machine supplied with 6 coarse, 4 medium, and 2 fine abrasive discs.

No. 900B . . . HEAVY DUTY BALL BEARING SANDER AND GRINDER. Designed and powered for the toughest assignments on either continuous production or heavy duty intermittent work. It will handle any surfacing job using cup grinding, cup wire wheel brushes, rotary planer heads, or abrasive discs. Six coarse, four medium, and two fine abrasive discs regularly supplied.

MOTORS: Universal for D.C. or A.C. 25 to 60 cycle.
VOLTAGES: 110, 220 or 250 Volts.
PADS: Nos. 775B and 900B equipped with patented super-flexible laminated pads.
GEARS, PINIONS and SPINDLES: Heat treated chrome nickel steel.
BEARINGS: Ball bearing throughout.
SWITCHES: Double pole, fully enclosed.
CORD and PLUG: 10 feet best rubber-covered three-wire, with unbreakable plug.

No.	Diam. Disc.	N.L. Speed R.P.M.	List Price
775B	7" Stan.	4600	$93.94
900B	7" H.D.	4600	$107.36

No. 9009 Disc Cutter



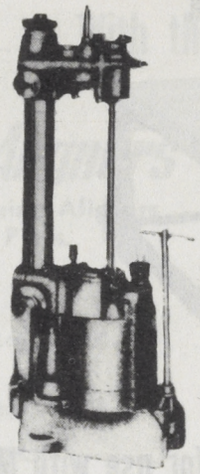
For trimming, sanding, and grinding discs to smaller diameters as outer surfaces wear and become ineffective. Cuts 9", 8", 7", 6" and 5" diameters. Heavy steel base, fixed center, ample cutting leverage, and hardening and tempered steel cutting wheel. Transparent red plastic handles.

Complete Net Price: $14.76
Extra Rotary Cutters Net Price: .81

WE SPECIALIZE IN GROUSER STEEL

VAN NORMAN BORING BARS

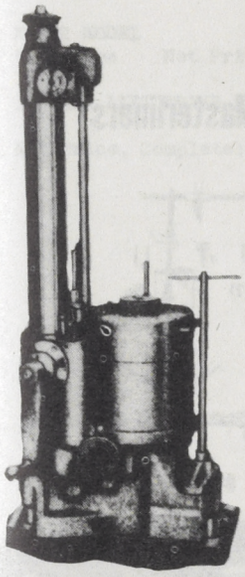
"The Bars with the Catspaws"



Equipped for Sucker-Outer

No. 944-S "PER-FECT-O"

The ideal Boring Bar for garages, dealers, and jobber shops for reboring cylinders 2.2″ to 4.260″ — in the chassis. No. 944-S weighs approx. 115 pounds. Easily carried by one man. Spindles are hardened and ground. Ball and roller bearing equipped throughout. Spiral gears in upper gear box for quiet, smooth operation. Equipped with the exclusive Van Norman "Catspaws" which assure positive centering and a smooth, accurate, chatter-free cylinder in ONE CUT.



Equipped for Sucker-Outer

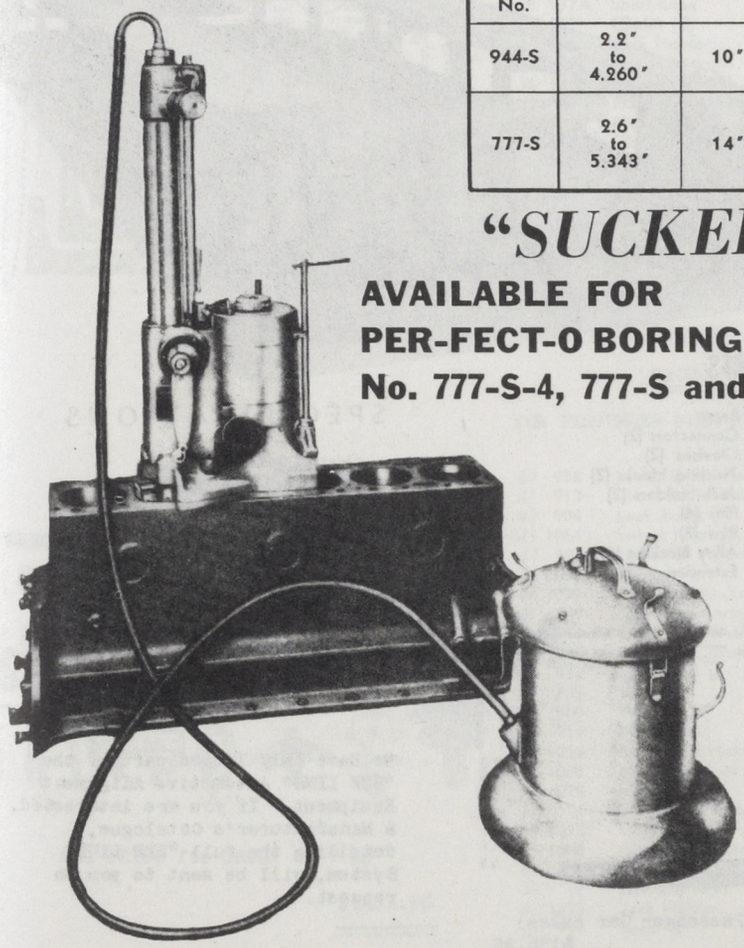
No. 777-S "PER-FECT-O"

The general purpose Boring Bar for cylinders from 2.6″ to 5.343″, where cylinders and sleeves of Brinnell hardness of 400 and up are not encountered. Two feeds and two speeds assure the proper speed and feed for the tungsten carbide cutter throughout the wide range of the Bar. Low speed of 220 R.P.M. is ideal for extra heavy sleeving cuts. Equipped with the exclusive Van Norman "Catspaws," which mean positive centering and a smooth, accurate, chatter-free cylinder in ONE CUT.

SPECIFICATIONS

Model No.	Capacity	Depth	Net Weight Approx.	Ship. Wt. Approx.	Speeds R. P. M.	Feeds	Motor
944-S	2.2″ to 4.260″	10″	115 lbs.	185 lbs. 36″x13″x15″	344	1-3/4″	1/4 H. P.
777-S	2.6″ to 5.343″	14″	135 lbs.	200 lbs. 37″x13″x15″	High 375 Low 220	2-1/2″ per m. 1-1/2″ per m.	1/2 H. P. Capacitor Type Ball Bearing

"SUCKER-OUTER" Vacuum Attachment



AVAILABLE FOR PER-FECT-O BORING BARS No. 777-S-4, 777-S and 944-S

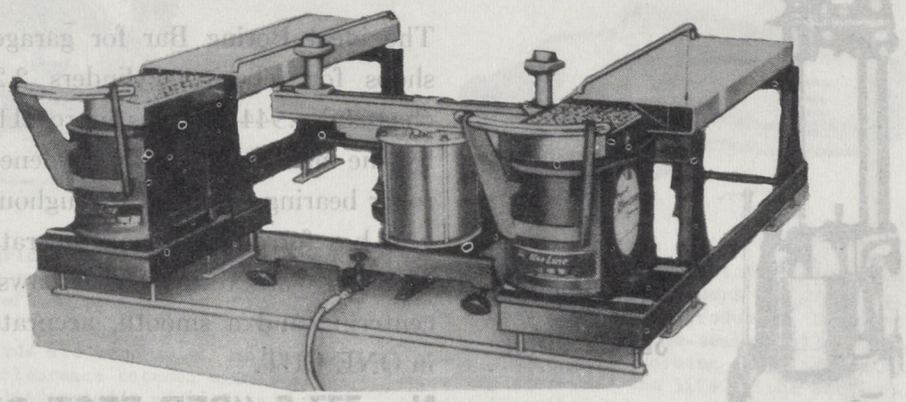
Van Norman quality and advanced engineering are seen in every feature of the "Sucker-Outer" chip removing attachment. High velocity, multi-stage vacuum unit sucks *up* all chips and dust from the tool and *out* into the container. The dust and chips are kept out of the crankcase and oil holes in the crankshaft. Chips and dust are caught in a special compartment in the container and never reach the totally protected vacuum motor.

At time of going to Press we were unable to quote prices on these machines. However, by the time this Catalogue is in your hands, these prices will be available. Please do not hesitate to write for same.

Bee Line---Masterliners

Front-End Aligners

Runways and Turning Aligners with Airjack



PIT MODEL--1 SECTION
WITHOUT AIR JACK BEAM
AND SUPPORTS:
NET PRICE: $541.69

AIR JACK BEAM &
SUPPORTS ONLY:
NET PRICE: $242.55

Runways and leg assemblies are removable for complete accessibility.

Runways and turning aligners are adjustable in tread width.

Runways are equipped with chrome guide rails.

Removable chrome bar bumpers on turning aligners.

"King-Pin" Turning aligners have hardened and around ball bearings.

SPECIFICATIONS

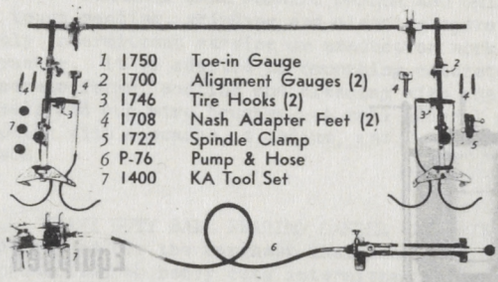
Overall width—78 in.
Runway sections—45 in. x 14 in.
Tread-width, adjustable from 39 in. to 72 in.

Capacity of Air Jack: 2000 lbs. lift for each 25 lbs. of line pressure.

Recommended pit dimensions—24 in. deep x 13 ft. wide x 13 ft. 5 in long. (Add 45 in. to pit length for each additional runway section)

Airjack, as shown, is optional

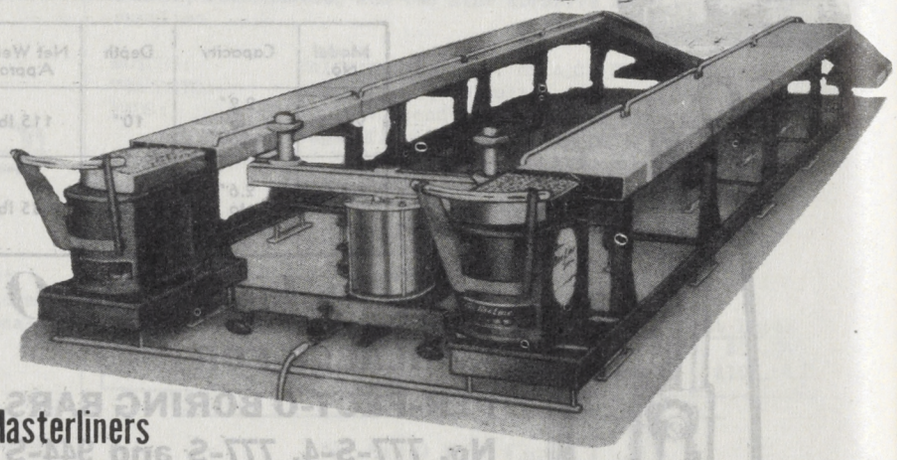
Tool groups for use with Masterliners



1	1750	Toe-in Gauge
2	1700	Alignment Gauges (2)
3	1746	Tire Hooks (2)
4	1708	Nash Adapter Feet (2)
5	1722	Spindle Clamp
6	P-76	Pump & Hose
7	1400	KA Tool Set

Group No. 1 Net Price: $374.85

MASTERLINER
Turning Aligners with four-section runways and approaches. Airjack, as shown, is optional.



FLOOR MODEL---3 SECTION
WITHOUT AIR JACK BEAM & SUPPORTS
NET PRICE: $889.35

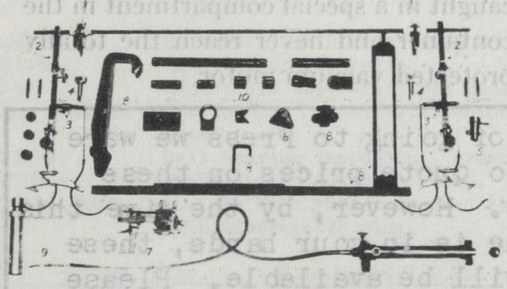
AIR JACK BEAM & SUPPORTS ONLY:
NET PRICE: $242.55

Tool groups for use with Masterliners

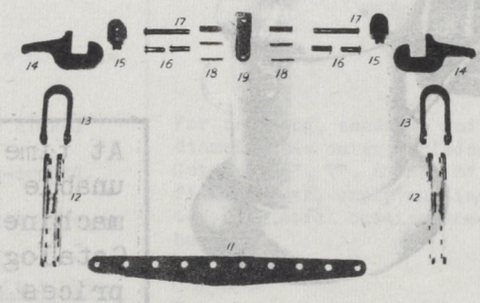
1	1750	Toe-in Gauge
2	1700	Alignment Gauges (2)
3	1746	Tire Hooks (2)
4	1708	Nash Aadpter Feet (2)
5	1722	Spindle Clamp
7	1400	KA Tool Set
8	1435	Knee Action Corrector
9	S-71	10 Ton Porto-power
10		Porto-power Extensions & Adapters
11	1212	Beam
12	1214	Connectors (2)
13	1213	Clevises (2)
14	1416	Twisting Hooks (2)
15	1038	Jack Holders (2)
16	948	Pins (4)
17	959	Pins (2)
18		Alloy Blocking (6)
19	1607	Extension

SPECIFICATIONS

Overall width—78 in.
Length—3-section, 163 in.
4-section, 208 in.
Add 9 ft. for approaches
Height—24 in. ± 2 in.
Tread-width—39 in. to 72 in.



GROUP 2 (for Knee Action cars only)
NET PRICE: $565.95



GROUP 3 (for Passenger Car axles)
$185.96

We have only listed part of the "BEE LINE" Automotive Alignment Equipment. If you are interested, a Manufacturer's Catalogue, detailing the full "BEE LINE" System, will be sent to you on request.

WE SPECIALIZE IN CIL DUCO & DULUX

Frame Straighteners

------- With the Exclusive Bee-Line Airlift Frame Press ------

Advanced Aligners

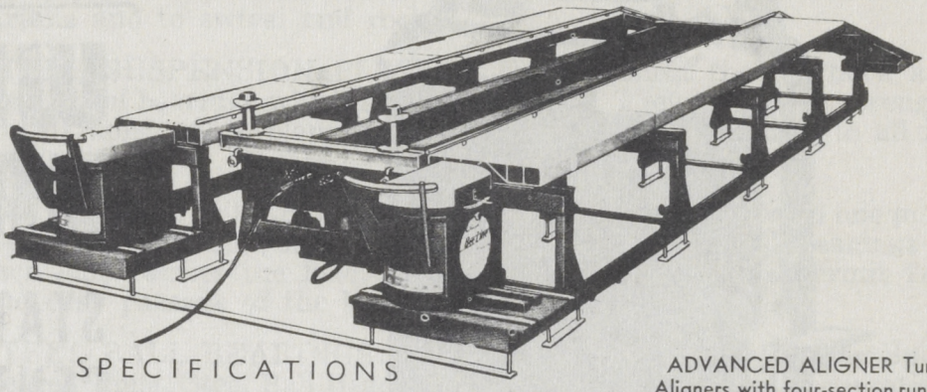
Runways and Turning Aligners with Airlift Frame Press.

FLOOR MODEL
4 Section Net Price: $1552.32

FLOOR MODEL
5 Section Net Price: $1746.36

15' AIR LIFT FRAME PRESS

Net Price, Complete: $889.35

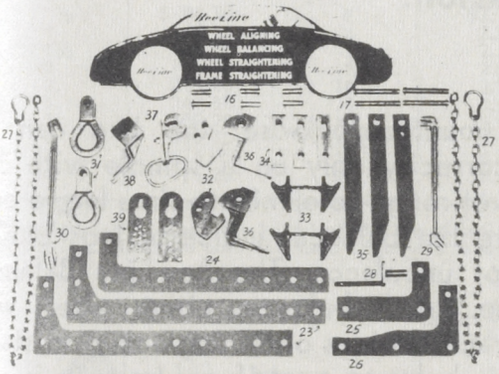


ADVANCED ALIGNER Turning Aligners with four-section runways and approaches, 15 ft. Airlift Frame Press

SPECIFICATIONS

Overall width—100 in.
Length—4-section, 208 in.
5-section, 253 in.
Add 9 ft. for approaches
Height—24 in. ± 2 in.
Tread-width—39 in. to 94 in.

Tool Groups for use with these Aligners



GROUP 7A

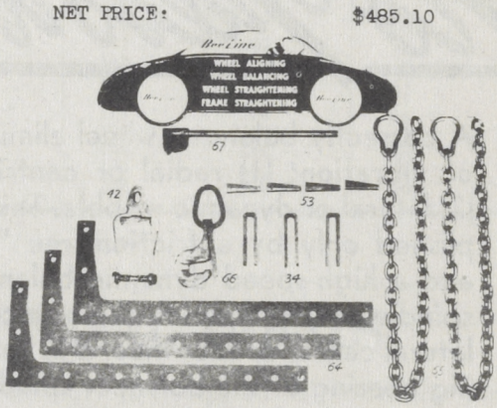
FOR PASSENGER CARS & LIGHT TRUCKS

23	924	Medium Knees (2)
24	925	Short Knee
25	937	Short Knee
26	937A	Short Knee
27	969	Chains (2)
28	955	Jack Holder
29	962	Flange Wrench
30	963	Flange Wrench
31	983	Hold Down Rings (2)
32	900	Holders (2)
33	920	Diamond Knee Bases (2)
34	928	Knee Extension Clamps (3)
35	927	Knee Extensions (3)
36	971	Frame Pull Hooks, 6" high 8" deep (2)
37	974	Hold Down
38	985	Frame Pusher
39	1080	Horn Pull Plates (2)
16	948	Pins (6)
17	959	Pins (4)

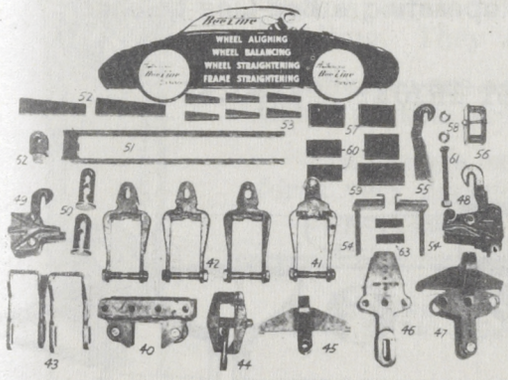
GROUP 8

FOR BUS & TRUCK

NET PRICE: $485.10



64	903	Long Knees (3)
65	970	Chains (2)
66	978	Hold Down
67	964	Flange Wrench
34	928	Knee Extension Clamps (3)
53	919	Wedges (4)
42	904	Yoke



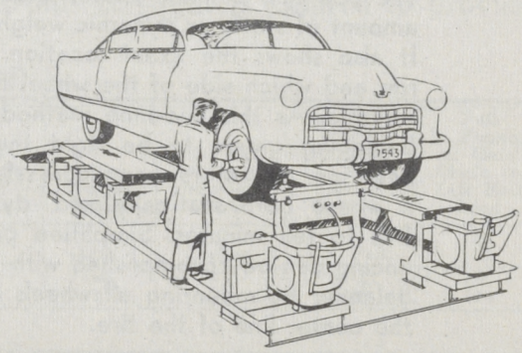
NET PRICE for GROUP 7A 7 &B

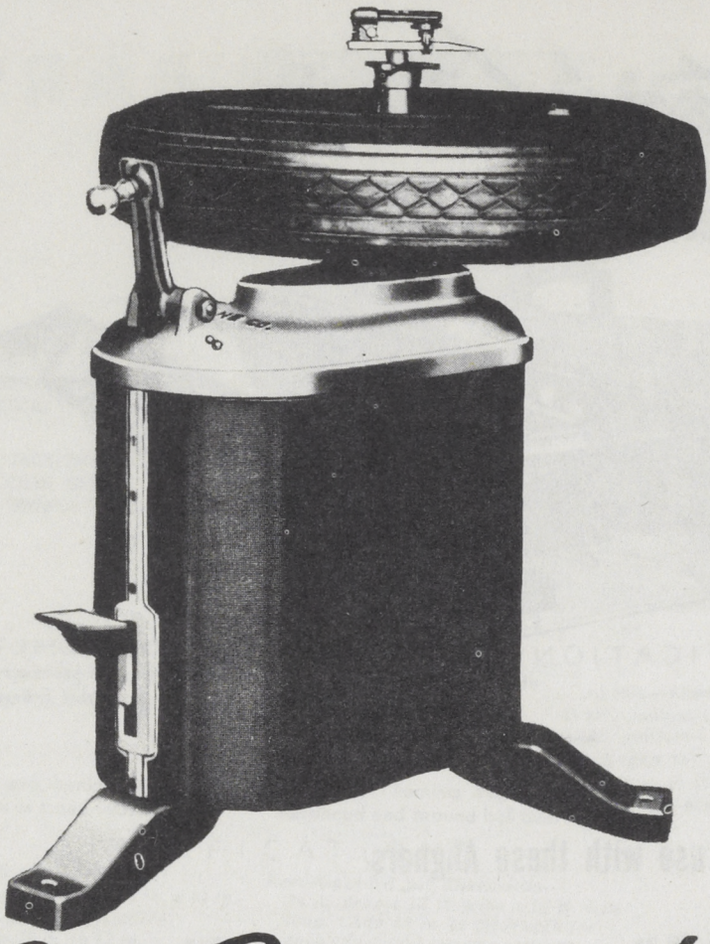
$1131.90

GROUP 7B

FOR PASSENGER CARS & LIGHT TRUCKS

40	938	Lower Cross Roller Assembly
41	913	Cross Roller Yoke
42	904	Lock Yokes (3)
43	1064	Swivel Yokes (2)
44	993	Horn Pull Assembly
45	6650	Anchor
46	1050	Jack Pressure Yoke
47	1040	Travelling Anchor
48	999	Chev Diamond Clamp Assembly
49	987	Diamond Clamp Assembly
50	926	Swivels (2)
51	933	Yoke
52	1500	Wedges (2)
53	919	Wedges (6)
54	1058	R & L Jack Holder
55	1005	Horn Pull Hook
56	1025	Hold Down
57	1014	Chrysler Clamps (2)
58	1015	Chrysler Rollers (2)
59	1008	Chev Jack Plate
60		Chrysler Clamp Plates (3)
61	1"x9"	Extension Bolt
62	1035	Jack Holder
63	991	Rasp (2)





Bee-Line Wheel Balancer

Beeline WHEEL BALANCER

STATIC, DYNAMIC AND CENTRIFUGAL ON ONE MACHINE—ONE SPINDLE

The Bee-Line Balancer insures greater customer satisfaction and profits, due to its high degree of accuracy and ease of operation.

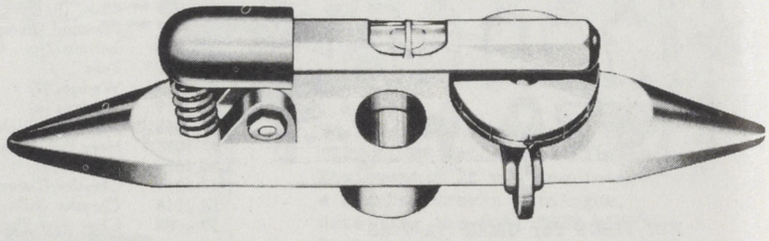
No Guesswork!

A correctly balanced wheel eliminates two types of vibration: (1) radial or centrifugal vibration, (2) lateral or dynamic wobble. This can be accomplished only by a friction-free "static balance" and a high-speed dynamic balance on the same spindle, with the wheel so mounted that the lateral center of the wheel is in line with the pivoting bearing of the balancer spindle. This is necessary in order to get complete separation of static and dynamic forces.

As one front wheel spins in a clockwise direction, the other counter-clockwise, the two can be balanced correctly only on a spindle with 360 degrees pivot range to eliminate time lag, a condition where the balancer indicator lags behind the point of unbalance. The Bee-Line Balancer has no time lag. It balances either wheel with equal accuracy. Besides obtaining accurate static and dynamic balance, centrifugal balance is also obtained with the Bee-Line Balancer, correcting vibration caused by unequal tire stretch in double-tube distortion. All guesswork is eliminated when operating a Bee-Line Balancer.

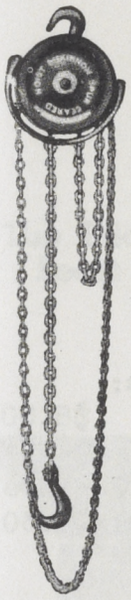
NET PRICE: $630.63

The Bee-Line Balance Meter shows the exact amount of static or dynamic weights to apply. It also shows the exact location around the rim and which side of the wheel to apply the weights. As this Bee-Line method insures the balancing gauge to be right the first time, Bee-Line operators can successfully balance a wheel both statically and dynamically in five to ten minutes. Simplified precision balancing can be accomplished with the Bee-Line Balancer by mounting all wheels and tires on the center line of the tire.

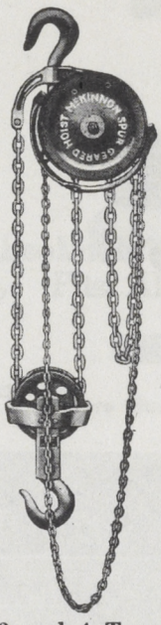


"McKINNON" CHAIN HOISTS

"McKINNON" BALL BEARING SPUR-GEARED CHAIN HOISTS



½ to 2 Tons Style



3 and 4 Tons Style

FEATURES OF CONSTRUCTION

STEEL TOP HOOK AND CROSSHEAD: Both are Steel Forgings of a very heavy construction designed to stand severe shocks and strains and to swivel and rock.

STEEL SUSPENSION PLATES: These connect the top hook and load wheel bearings which support the load. They give great strength to this hoist and prolong its life by allowing full freedom to all revolving parts.

STEEL LOAD WHEEL: A powerful and accurately ground one piece steel load wheel supported by Chrome vanadium steel ball bearings on each side carries the load. Accurately formed pockets permit free and easy passage of the load Chain.

STEEL BALL BEARINGS: In the "McKinnon" Ball Bearing Spur-Geared Hoist, Steel Ball Bearings are used to insure ease of operation, higher efficiency and longer life. They are of the self-contained type having larger diameter hardened and ground balls of high carbon chrome alloy steel enclosed in hardened and ground chrome vanadium steel races.

PRICE LIST

Capacity Tons	Price Complete Standard Lift	Standard Lift* in Feet	Extra Lift† Per Foot	Load Carried on Strands of Chain	Net Weight Complete	Gross Weight Boxed	Chain Pull to Lift Full Load	Hand Chain Overhauled to Lift Load One Foot	Minimum Distance Between Hooks
				Number					
½	$ 83.30	8	$2.14	1	61 lbs.	80 lbs.	57 lbs.	21 ft.	13 ins.
1	107.10	8	2.26	1	94 "	117 "	77 "	31 "	16 "
1½	142.80	8	2.38	1	136 "	164 "	103 "	35 "	18 "
2	166.60	9	2.50	1	204 "	250 "	112 "	42 "	21 "
3	214.20	10	3.57	2	212 "	260 "	107 "	70 "	31 "
4	261.80	10	3.81	2	301 "	358 "	116 "	84 "	36 "
5	333.20	12	5.12	3	413 "	484 "	102 "	126 "	44 "
6	392.70	12	5.12	3	413 "	484 "	122 "	126 "	44 "
8	476.00	12	6.43	4	500 "	570 "	128 "	168 "	46 "
10	571.20	12	7.74	5	612 "	702 "	132 "	210 "	50 "

*"Standard Lift" means the travel of the lower hook.
†"Extra Lift" includes both the hand chain and load chain.

"McKINNON" DIFFERENTIAL HOISTS



THE McKinnon Differential Hoist, (Weston Pattern) is designed in particular for service where loads are not being lifted constantly and where speed is not an important factor.

This hoist is unsurpassable for quality of material, workmanship and long life. Thousands of "DIFFERENTIALS" are daily saving time and labor in material handling. They are invaluable in automobile service stations.

Sheaves are accurately machined to prevent binding and permit easy operation. Chain pockets are perfectly formed to prevent undue wear on chain links.

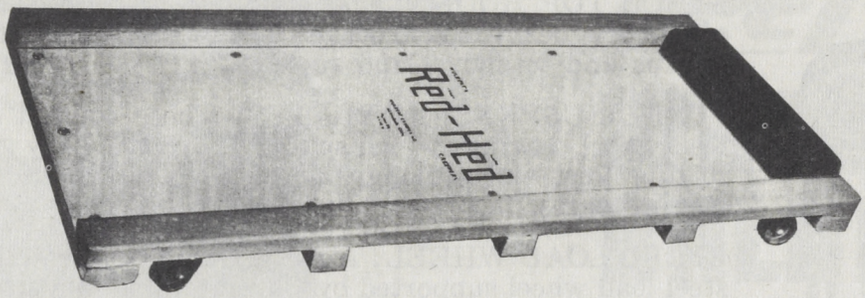
Frames are extra heavy malleable iron. Surplus strength is assured to provide for a very dependable factor of safety.

PRICE LIST

Capacity	Will Lift	Price	Reg. Chain	Extra Lift Price per Foot*	Net Weight with Chain	Gross Weight Boxed	Shortest Distance Between Hooks	Length of Chain Handled to Lift Load One Ft.	Pull in Pounds on Hand Chain to Lift Full Load
Tons	Feet		Lineal Feet		Lbs.	Lbs.	Inches	No. Feet	
½	7	$19.00	26	$5.71	32	36	21	24½	102
1	8	25.45	30	5.95	51	58	26	29½	190

*Each foot of extra lift includes 4 lineal ft. of chain.

GARAGE CREEPERS



- HARDWOOD FRAMES
- SOLID WHEEL CASTERS
- SCREWS USED THROUGHOUT
- BUILT LOW TO THE FLOOR
- NO NAILS TO WORK UP
- WOOD SEALED WITH SPAR VARNISH
- HEAD REST – ARTIFICIAL LEATHER COVERING – NEW COTTON FILLING

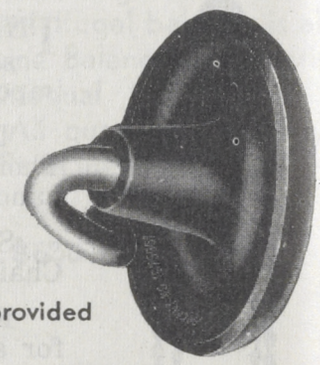
Net Price:
$8.50

Set of 4 Castors
Net Price: $3.30



MORE EFFICIENT AND MORE DURABLE...
ROLLS RIGHT OVER ROUGHEST SURFACES,
CRACKS, WIRES, OTHER OBSTRUCTIONS!

Net Price: $11.50
Set of 4 Castors
$5.10



The free-rolling action of the JEEPERS CREEPER is provided by the patented Ralco* Roller - -

OUTSTANDING FEATURES OF THE JEEPERS CREEPER

EXTREMELY STURDY HARDWOOD This bed or platform is not only good looking, but is so strong and durable that it can take rough treatment for some time.

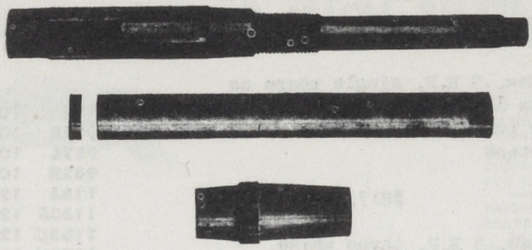
COMFORTABLE, DURABLE HEAD REST Padding is covered with a tough, long-wearing plastic material that is unaffected by water, acids, gas or oil.

EXTRA STRONG SHAFTS of special heat-treated steel assure proper performance and extra long life.

GUARANTEE The JEEPERS CREEPER is guaranteed to be free from defect in materials or workmanship, under normal use, for a period of 90 days.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

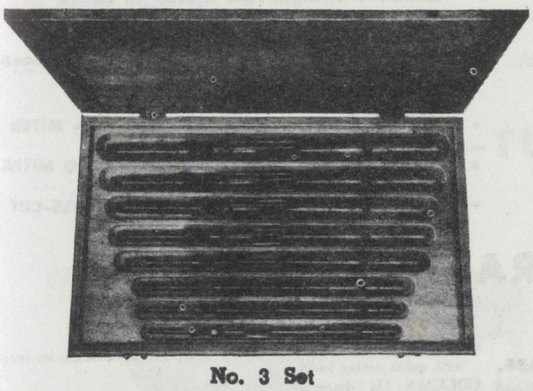
New Type Adjustable Reamers And Pilots



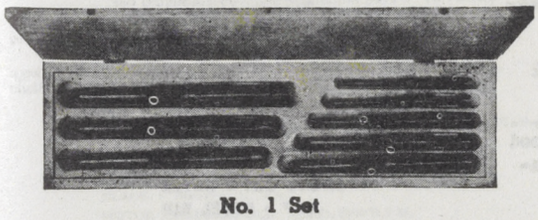
The Pilot Absolutely Revolutionizes Reaming. Increases Production at Least 50%. Fits All Standard Critchley Type Adjustable Reamers.



Above illustration shows **PILOT** attached to Critchley type reamer



No. 3 Set



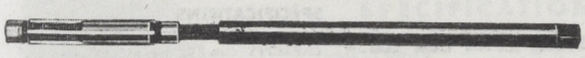
No. 1 Set

Sizes	Net Price Individual Reamers	Individual Pilots	Individual Reamers with Pilots Attached
8-A	$ 4.62		
7-A	4.62		
6-A	4.62		
5-A	4.62		
4-A	4.62		
3-A	4.62		
2-A	4.62		
A	4.40	$ 2.31	$ 6.71
B	4.30	2.58	6.88
C	4.61	2.58	7.19
D	4.61	2.75	7.36
E	4.73	2.75	7.48
F	4.73	2.92	7.65
G	5.28	2.92	8.20
H	5.55	2.92	8.47
I	6.71	3.24	9.94
J	7.60	4.25	11.85
K	9.57	5.06	14.63
L	11.44	6.05	17.49
M	16.61	8.58	25.19
N	21.90	11.99	33.89
O	33.88	15.56	39.44

VALVE GUIDE REAMERS

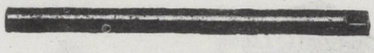
The Most Practical Way to Remove Carbon and True the Valve Guide

ADJUSTABLE BLADE TYPE



No.	Size	Net Price
395	1/4" to 9/32"	$1.05
396	9/32" to 5/16"	1.05
397	5/16" to 11/32"	1.05
398	11/32" to 3/8"	1.05
399	3/8" to 13/32"	1.05
400	13/32" to 7/16"	1.05
401	7/16" to 15/32"	1.05
394	Set of seven reamers listed above numbers 395 ot 401 inclusive, range 1/4" to 15/32" in neat metal box	7.37

EXTENSION SHANKS ONLY

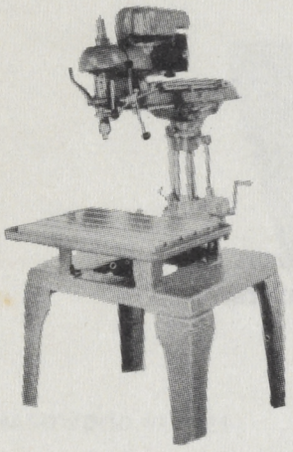


To be used on our numbers 8-A to 2-A New Type Adjustable Reamers, converting them into Adjustable Type Valve Guide Reamers, that can be used for other Alignment reaming.

No.	Size	Net Price
385	1/4" to 9/32"	$ 5.72
386	9/32" to 5/16"	5.72
387	5/16" to 11/32"	5.72
388	11/32" to 3/8"	5.72
389	3/8" to 13/32"	5.72
390	13/32" to 7/16"	5.72
391	7/16" to 15/32"	5.72
384	Set of seven extension shanks listed above numbers 385 to 391 inclusive, range 1/4" to 15/32", in neat cardboard box	42.63

WOOD WORKING EQUIPMENT

WALKER-TURNER
"1100" SERIES RADIAL SAWS



RA1140 Radial Saw, 3 H.P. single phase as shown, including 12" combination blade, wood table, saw guard and overload release..less stand.

Net Price: $817.16

RA1140 Radial Saw, 5 H.P. three phase, inclusing 12" combination blade, wood table, saw guard .. less stand.

Net Price: $817.16

SPECIFICATIONS

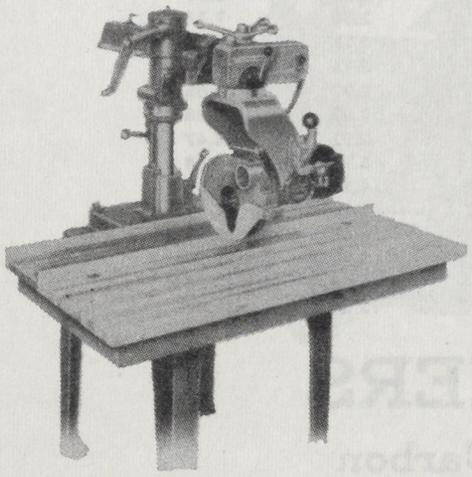
TABLE TOP: Hardwood 46" x 24". Removable center fence with quick change wedges.
ARBOR: ¾"
COLUMN: Precision ground 3¾" diameter. 8½" travel.
UNIVERSAL HEAD: Motor swivels to all operating positions and is instantly located by self-indexing, tapered latches at vertical, horizontal and 45° positions. Graduated scale shows position of saw blade and arm in degrees.
CAPACITY:
8" Dado Head cuts 2¼" deep
10" Blade cuts 3⅛" deep
12" Blade cuts 4¼" deep
SAW TRAVEL: Ram travel 21½". Maximum cut with 8" blade on 1" stock 19½"; on 4" lumber using 12" blade 16½".
DIMENSIONS: Height overall 66". Floor space 4' x 5'.

ACCESSORIES

9B2 10" Cross cut Blade ¾" hole
9B2R 10" Rip Blade ¾" hole
9B2C 10" Combination Blade ¾" hole
9B2H 10" Hollow Ground Blade ¾" hole
11B3 12" Cross cut Blade ¾" hole
11B3R 12" Rip Blade ¾" hole
11B3C 12" Combination Blade
11B3H 12" Hollow Ground Blade ¾" hole
9B36S 6" Dado Head—13/16" wide, ¾" hole
11B36 8" Dado Head—13/16" wide, ¾" hole
RA23X Sash Set ¾" hole
Consists of:
RA230-1 Cope cutter
RA230-2 Rabbeting cutter
RA235-5 Spacing Washer
RA235-3 Straight Faced cutter
RA235-2 Sash cutter
RA225 Molding Head ¾" hole
RA225-1 Straight Face Knives for above
RA225-3 Stair Nosing Knives for above
RA225-6 Radius Cutter for above
RA225-7 Tongue and Groove cutter for above

• PLOUGH • CROSS-CUT
• GROOVE • DADO • MITER
• TENON • COMPOUND MITER
• SHAPE • ROUT • BEVEL CROSS-CUT

"900" SERIES CENTR-PIVOT RADIAL SAWS



RA901 Radial Saw, 1½ H.P. single phase, 115/230 volt, 60 cycle motor, hard wood table top, legs, saw guard and 9" combination blade.

Net Price: $611.32

RA901 Radial Saw, 3 H.P. three phase, 220/440 volt, 60 cycle motor, hard wood table, legs, saw guard and 12" combination Blade.

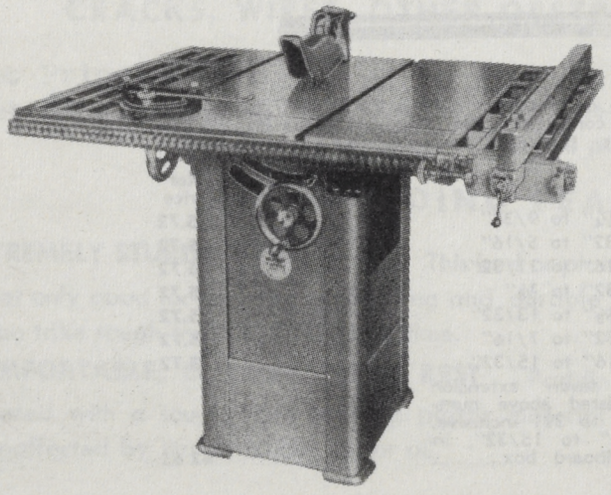
Net Price: $695.18

SPECIFICATIONS

TABLE: Laminated hard wood, 46" x 24", removable center fence with quick acting locks.
COLUMN: 3¼" diameter, raises 7¾".
RAM: 24" travel, adjustable stops on graduated bar.
UNIVERSAL HEAD: Motor swivels to all operating positions and is instantly positioned by self-locating taper latches. Graduated scale shows position of saw in degrees.
CAPACITY: 6" Dado cuts 1⅝" deep. 8" Blade cuts 2⅝" deep. 9" Blade cuts 3⅛" deep. 10" Blade cuts 3⅝" deep. 12" Blade cuts 4⅝" deep.
SAW TRAVEL: Rips to center of 48" panel.

CROSS-CUT • MITER
RIP • BEVEL RIP
COMPOUND MITER
BEVEL • TENON
DADO • PLOUGH
RABBET
SHAPE
ROUTE

WALKER-TURNER 10 INCH TILTING ARBOR SAW



TA1181--10" Tilting Arbor Saw including Guard and Splitter, front extension table, Miter Gauge, and 10" Combination blade.

Net Price: less motor: $303.56

TA1182--10" Tilting Arbor Saw as shown at right, including Guard and Splitter, Front and Side Extension Tables, Miter Gauge and 10" Combination Blade.

Net Price: less motor: $349.13

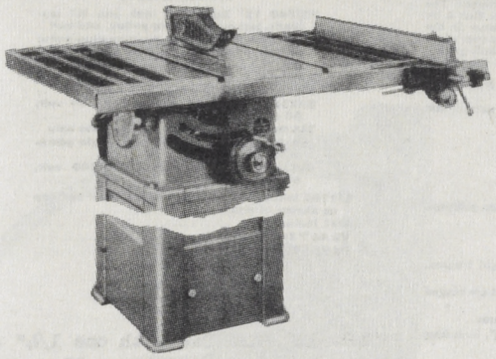
SPECIFICATIONS

CAPACITY: Cuts 3⅛" deep with 10" blade. 2¼" material at 45°. 6" Dado Head cuts 1⅛" deep.
SAW ARBOR: ⅝" Acme left hand thread, takes up to 1" wide dado.
SPEED: 3800 rpm.
TABLE: Cast iron, 26¾" wide x 32½" deep with front extension. With side extensions 44¾" wide. Front of table to blade 18".
BEARINGS: Two dust sealed ball bearings.
DRIVE: Triple "V" Belt.
GUARD: Safety guard, splitter and two anti-kick back pawls. Guard assembly esaily removed by means of hand screw.
FENCE: Locks front and rear. Spring loaded support bracket keeps fence aligned with blade while setting up. One lever locking device locks at front and rear.
Fence is cast aluminum machined both sides and relieved at back to provide clearance.
MITER GUAGE: Self-indexing, ⅜" x ¾" tongue.
TILTING MECHANISM: Hand wheel swings entire arbor and drive unit. Stops at 45° and 90° positions; pointer and scale show in-between positions.
DIMENSIONS: Height 41", width 49⅛", depth 38¾".

EVERY ORDER IS A RUSH ORDER WITH US.

WOOD WORKING EQUIPMENT

WALKER-TURNER 9 INCH TILTING ARBOR SAW



SPECIFICATIONS

CAPACITY: 3⅛″ with 9″ blade; 2⅜″ at 45°. 6″ Dado-1⅝″.
SAW ARBOR: ⅝″ Acme, left hand thread. 1″ dado capacity.
SPINDLE SPEED: 4,000 rpm.
TABLES: Cast iron, 23″ deep by 19″ wide, with extensions 23″ x 37″.
BEARINGS: Two dust sealed ball bearings on spindle.
DRIVE: Single V Belt. Integrally mounted with constant pulley center distance.
SAW GUARD: Saw guard with splitter and two anti-kick pawls available as an accessory.
BASE: One piece welded steel.
RIP FENCE: Cast aluminum, cast iron support bracket with spring loaded alignment feature. 23¼″ long. Has vernier adjustment.
DIMENSIONS: Height, with guard 17¼″, width, 41½″ with extension tables. Depth 40½″.

FEATURES

The motor and tilting unit which supports the saw arbor are securely attached to the underside of the heavy table, assuring utmost rigidity and stability. Unit tilts on double trunions attached to the table, a large diameter square thread screw operates the tilting action.

The table and extension tables are made of cast iron, heavily ribbed; the extensions are of the grid type combining light weight with rigidity.

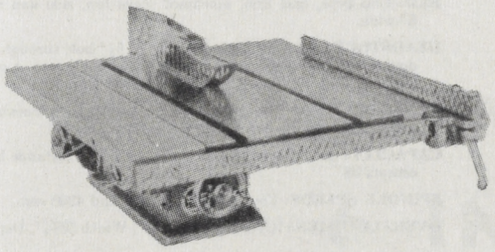
TC996 Tilting Arbor Saw, includes 9" combination blade, extension tables, miter gauge, guard and splitter, belt and motor pulley.
Net Price: Less Motor: $216.46

TC505X Set of Extension Tables and Bolts $28.30

TC995 Tilting Arbor Saw, includes 9" combination blade, belt and motor pulley.
Net Price: Less Motor: $159.50

TC524X Guard and Splitter, complete $ 9.70

WALKER-TURNER 8 INCH TABLE SAW



SPECIFICATIONS

SAW TABLE: 15″ by 20¼″ deep. Two mitre gauge slots.
EXTENSION TABLES: Front table 4″ wide, side tables, 5″ wide. Table size with extensions, 25 by 24¼″.
BEARINGS: Two ball bearings on saw shaft.
CAPACITY: Depth of cut 2½″ maximum with 8″ blade.
BLADE: 8″ diameter, ⅝″ bore.
MOTOR RECOMMENDED: ½ H.P., 3450 R.P.M.

CB970 8" Table Saw, including guard and splitter, rip fence, belt and motor pulley. Blade, mitre gauge, extension tables are not included.
Net Price: less motor: $72.77

1J110X Floor Stand. Net Price: $38.96

OUTSTANDING FEATURES

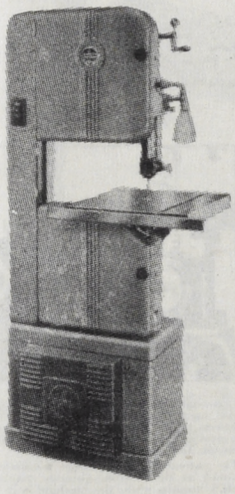
The Walker-Turner CB970 Bench Saw is designed and built to the highest engineering standards. It will meet the most exacting requirements of the carpenter, cabinet-maker, and craftsman. For an outstanding value in a machine of this type, the Walker-Turner CB970 is hard to beat. The smooth operating depth of cut and angle of tilt and the quickly adjusted ripping fence will appeal to every user of this machine.

Designed to meet the need of the average builder or contractor, special attention has been given to making a machine that will maintain its accuracy and stand up under a more than normal amount of abuse. All unnecessary weight has been eliminated, making this saw easy to move about from job to job.

The base of the machine is made from heavy gauge steel welded for greater strength. The table is close grain gray iron, milled to a plane surface. The rip fence is a solid steel bar drilled to permit attaching a wood face if desired. The soft metal guard and the kick-back pawls are mounted on a steel splitter; this entire unit is readily removed.

The motor is mounted on an extension of the arm which carries the saw arbor, making the motor and saw an integral unit. The handwheel located in front of the machine raises and lowers the saw blade, while the wheel on the side of the machine controls the angle of table tilt. This wheel is provided with a positive lock to hold the saw at any desired angle. The table may be tilted up to 45° in one direction.

16 INCH WOOD-WORKING BAND SAW



SPECIFICATIONS AND FEATURES

CAPACITY: Blade to frame 16″.
Guide to table 8″.
SPEEDS: 3515 surface feet per minute (825 rpm.) with standard 1740 rpm. motor.
DRIVE: V belt, ⅝″ wide "B" section.
TABLE: 18″ x 19″, gray iron. Tilts to 45° forward and 5° to rear.
GUIDES: Upper and lower guides each have ball bearing rear thrust rollers, with split-leaf double-contact steel guides to provide maximum support close to work.
BLADE ADJUSTMENT: Tension and tracking mechanism incorporated in upper wheel unit; assembly rides on two heavy ground steel rods, with spring cushion to absorb blade shock. Tension and tilt regulated by horizontal hand crank and knobs.
GUARDS: Hinged cast aluminum doors cover wheels. Blade fully shielded. Wheel housings are cast iron.
BEARINGS: Six ball bearings—two on upper shaft, two on lower shaft, two on thrust rollers.
WHEELS: 16″ diameter with rubber tires ground to a crown face. Dynamically balanced; gray iron.
FRAME: Cast iron, three-unit type construction. Patent applied for.
STAND: Cast iron stand or base (included on MCB1151) includes hinged motor bracket with foot pedal adjustment and belt guard.
OVERALL DIMENSIONS: Height (with base) 68⅜″, height (without base) 48½″, width 33¾″, depth 22″.

MCB1151 16" Band Saw as shown including 3/8" blade, light, carriage bar, motor switch, base, belt and pulley.

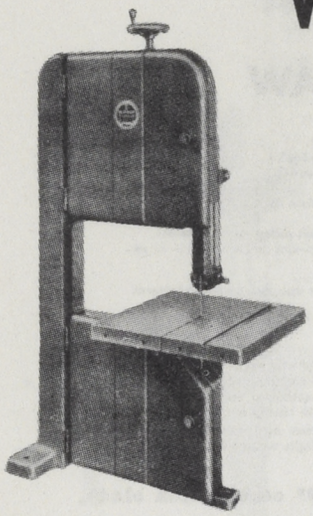
Net Price: less motor: $524.06

MCB1150 16" Band Saw as above but less

Net Price: less motor: $418.22

WOOD WORKING EQUIPMENT

WALKER-TURNER 12 INCH BAND SAW



The Walker-Turner 12″ Band Saw is a completely new machine, revolutionary in design and construction. Now, for the first time in band saw manufacturing, all the basic parts of the machine are functional. The unit construction used in the building of the Walker-Turner 12″ Band Saw provides a machine that is by far stiffer and more solid than that found in any machine using the customary one piece frame. In the Walker-Turner Unit Design, the main column or back-bone of the machine supports the two cast iron wheel housings that in turn carry the wheel bearings and the other elements of the saw such as the blade guides, table brackets and so forth. The wheel housings are fitted with strong, light weight covers that completely cover the saw blade and wheels.

The upper wheel is aligned by means of a simple but positive screw device that requires little or no attention once it is aligned.

Upper and lower blade guides are improved to give maximum support to both wide and narrow saw blades. An easily adjusted roller provides back support on the upper guide.

SPECIFICATIONS

CAPACITY: Blade to frame 12″, upper guide to table 7″, Blade width ⅛″ to ¾″.

BLADE SPEED: 1500 feet per minute, using a 1740 rpm motor.

GUIDES: Split leaf type for side thrust, with hardened steel roller in upper guide.

FRAME: Cast iron unit type construction. Simplified three unit design to provide maximum stiffness. Patent applied for.

BEARINGS: Saw wheels run on four ball bearings, two on each wheel.

WHEELS: Cast aluminum alloy, dynamically balanced and rubber tired.

TABLE: Cast iron milled working area with a ⅝″x⅜″ mitre gauge slot, table tilts to 45° on rigid trunion, positive stops at 45 and 90°.

GUARDS: Upper and lower wheel guards are cast iron, fully covered by sheet steel doors that are hinged for easy access. Entire blade is guarded except working area between guide and table.

RECOMMENDED MOTORS: ½ hp, 1740 rpm, Walker-Turner Capacitor type or three phase.

DIMENSIONS: Height, machine only 42″, machine on stand 67″. Width 17″, Length 34½″, including rear mounted motor. Table to floor, on stand, 40″ Table to stand, 15″.

MODEL LISTING

BW740 12″ Band Saw with one ¼″ saw blade, less motor, motor pulley, and belt

BW143X Motor Bracket. For mounting motor at rear of machine as shown in photo at left

VB44 44″ V Belt

BW144X Belt Guard

KAB3E ⅓ hp, single phase, 115/230 volt, 60 cycle motor

TS5 On and off switch for single phase only

#14 10 ft. cord and plug for single phase motors only

PAB3E ⅓ hp three phase, 220/440 volt, 60 cycle motor

BJ110X Stand, cast iron legs, wood shelf and top as shown at right

MB1 Motor Rails

VB 46 V Belt

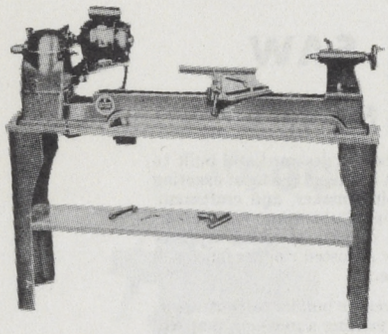
PV 258 Motor Pulley ⅝″ bore

PRICE LIST

BW740 12" Band Saw with one 1/4" saw blade, less motor, motor pulley and belt.

Net Price: $146.27

WALKER-TURNER 4 SPEED LATHE



FEATURES AND MODEL LISTINGS

The Walker-Turner Four-Speed Lathe is a general purpose wood-turning lathe combining the best principles of lathe design with massive construction and manufacturing precision. While built primarily for wood turning, its heavy cast iron headstock and double row spindle bearings make it an ideal machine for metal spinning. Four-step spindle and motor pulleys offer ample range of speed varying from 700 to 4200 rpm.

The V belt and spindle pulley are fully protected by a quick-change guard.

Head and tailstock spindles are machined to accommodate No. 2 Morse Taper centers and arbors, permitting the use of wire wheels, grinding wheels and sanding drums.

L951—Lathe, bench model with 39″ V belt, rear motor bracket, head and tailstock centers, four-step motor pulley, 6″ and 12″ tool rests

WL77X—Lathe Bench as illustrated

KAB5E—½ hp. motor, single phase, 110/220 volt, 60 cycle, 1740 rpm., capacitor start

PAB5E—½ hp. motor, three phase, 220/440 volt, 60 cycle, 1740 rpm.

SPECIFICATIONS

BED: Gap type, cast iron, machined ways top, side and bottom. 5″ wide.

HEADSTOCK: Cast iron, spindle 1″ O.D. ⅝″ hole through center, double row ball bearings at spindle nose, single row at opposite end. No. 2 Morse Taper Socket in spindle nose.

TAILSTOCK: Cast iron, machined for precision fit between bed ways. Steel spindle has No. 2 Morse Taper Socket.

CAPACITY: Swing, over gap 15″, over bed 12″, distance between centers 38″.

SPINDLE SPEEDS: Four, 700, 1150, 2200 and 4200 rpm.

OVERALL DIMENSIONS: Height 47¼″, Width 58½″, Depth 26″.

Swing	Distance
Over Bed 12″	Between
Over Gap 15″	Centers
. . .	38″

PRICE LIST

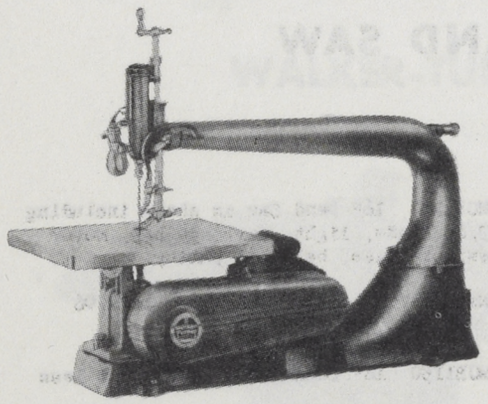
L953 Lathe, less motor and Bench.

Net Price: $178.61

WL77X Lathe Bench.

Net Price: $50.94

WALKER-TURNER 24 INCH FOUR SPEED JIG SAW



FEATURES

The Walker-Turner 24″ Jig Saw with its four carefully chosen operating speeds, the easily and quickly adjusted blade tensioner, the improved blower and the many other features of superiority have set an entirely new standard of jig saw performance. One demonstration will convince you.

Thousands of these J915 Jig Saws are in use the world over cutting not only wood, but paper, fibre, plastics, bone and all kinds of thin sheet metals. It can also be used with machine files for die filing and other similar filing operations.

SPECIFICATIONS

BLADE TENSIONER: A patented Walker-Turner feature that makes possible rapid blade changing and permits tension adjustments to be made while the machine is running.

DRIVE MECHANISM: Reciprocating type, bronze bearings, splash lubrication.

NEW BLOWER: New positive action blower, built into base, assures constant air stream at all times.

SAW GUIDE AND HOLD-DOWN: New saw guide and hold-down are easily adjusted to all thicknesses of work. Bronze guide supports the back of the blade.

THROAT CAPACITY: Twenty-four inches. Arm may be swung to either side or removed completely for large work.

VISES: Standard vises will accommodate all jig and fret saw blades up to ⅛″ wide. Wider blades require the use of SJ236A Vises. Capacity, upper vise to table is 2¾″ when using a 6″ blade.

DIMENSIONS: Overall height on stand 50½″, without bench, 25½″. Length, 33″.

MODEL LISTING

J915 24″, Four Speed Jig Saw, including motor pulley and belt, less belt guard, lamp, switch and motor

7J125 Belt Guard

JL3 Lamp, complete

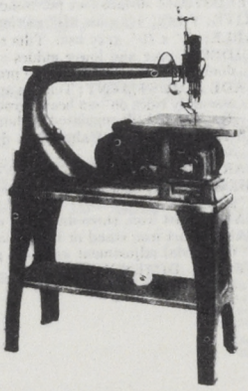
JS1 Bench for J915 Jig Saw, cast iron legs with wood top and shelf

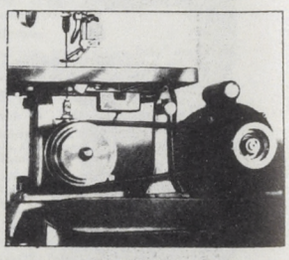
SJ236A Heavy duty vises for sabre blades

E10X On-off switch with cord, for single phase only

SJ147 10′ Extension cord and plug

KAB3E ⅓ hp, 1740 rpm, 115/230 volt, 60 cycle, single phase motor





Under-table view shows table bracket, blade vise main housing and guard bracket. Four speeds, 600, 900, 1250 and 1740 rpm provide correct range for all types of work from fret sawing to metal sawing.

The patented Walker-Turner tensioning head shown at right below, permits changing the blade tension while the machine is in motion and it simplifies blade changing.

PRICE LIST

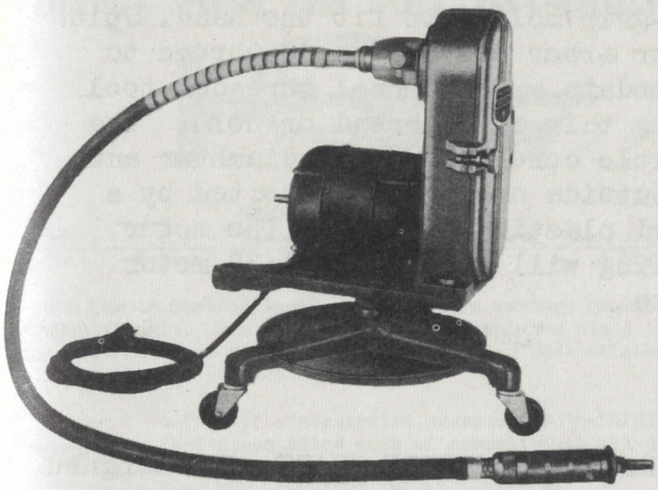
		Net Price
J915	24" Jig Saw less motor	$98.10
JS1	Bench	34.69
SJ236A	Heavy Duty Vise	3.23

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

WOOD WORKING EQUIPMENT

WALKER-TURNER

FLEXIBLE SHAFT MACHINE



The Flexible Shaft Machines shown on this page are designed for commercial, light industrial and work-shop use.

Models No. 253 and 258 are identical with the exception of the drive, the latter being a belt driven, multi-speed model while the No. 253 is a single speed, direct drive model. Both models are adapted for repair, service and maintenance shops for all types of grinding, sanding, buffing, drilling and similar operations.

A heavy cast iron housing carries the jack-shaft bearing assembly and encloses the belt and pulleys. The motor, motor base and pulley housing swivels on a tripod base. Jack-shaft and handpiece spindles are mounted on dust sealed ball bearings.

Cores are built up of transversely wound layers of high carbon steel wire and are designed for maximum strength and flexibility.

MODEL LISTING

258 Multi-speed Flexible Shaft Machine, shown at left with ⅜″ diameter core, heavy duty ball bearing handpiece and rubber covered casing, less motor.....

Net Price: less motor: $66.15

6 INCH JOINTER



The P911 Jointer is the product of more than 15 years of experience in building jointers of this type. The solid steel cylindrical cutter head with its three knives, cast iron tables on dove tail ways with adjustable gibs and large hand wheel controls, its husky one piece cast iron base and single V belt drive are testimony to the engineering experience behind this machine. The leg of mutton type knife guard provides ample protection and is readily removed for rabbeting operations or other work where a clear table is required.

Outstanding among the many features of the P911 Jointer are: Big tables over 7″ wide and 37½″ long . . . Portability—the unit is readily moved from job to job . . . Basic Walker-Turner table gives simple, accurate depth adjustment . . . Fence tilting accuracy is insured by a graduated quadrant, 45° and 90° indexing plunger.

SPECIFICATIONS

CAPACITY: Knives 6″ wide (3). Rabbets up to ½″ deep.

TABLES: Heavy gray iron castings with tops precision milled. Machined dove-tailed ways for lasting accuracy.

BASE: Heavy one-piece gray iron casting, carefully machined.

CUTTERHEAD: Solid steel, ground and dynamically balanced, three knife, approved safety type, 2½″ diameter.

SPEED: 3900 rpm., 11,700 cuts per minute with 3450 rpm. motor.

BEARINGS: Two precision, dust sealed ball bearings.

KNIVES: 6″ long, made of selected steel honed to a fine edge and held in position by four jack screws in the chip breaker.

DEPTH INDICATOR: Accurately shows the depth of cut in fractions of an inch.

FENCE: Tough aluminum alloy, ground surface, 33½″ long, moves across full width of table for rabbeting. Tilts to 45°, has index plunger.

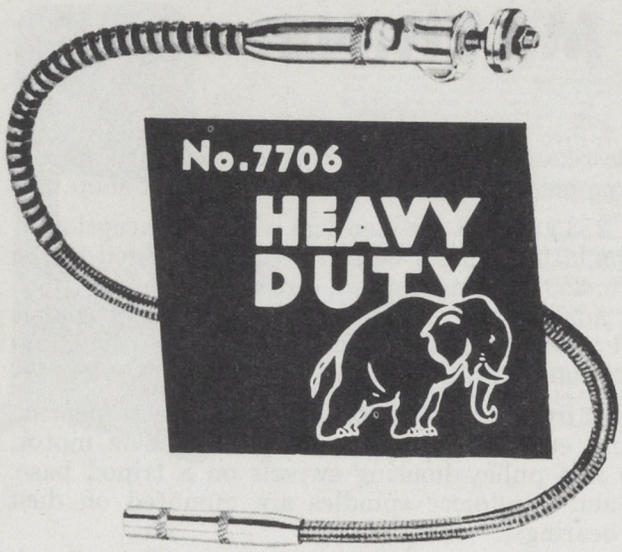
OVERALL DIMENSIONS: Height, floor to table 34½″, Length 42½″.

PRICE LIST

P911 Six Inch Jointer as shown with single V belt drive and flat type swing guard, knives, belt and motor pulley. 9P9 Set of 3 Knives (replacement)

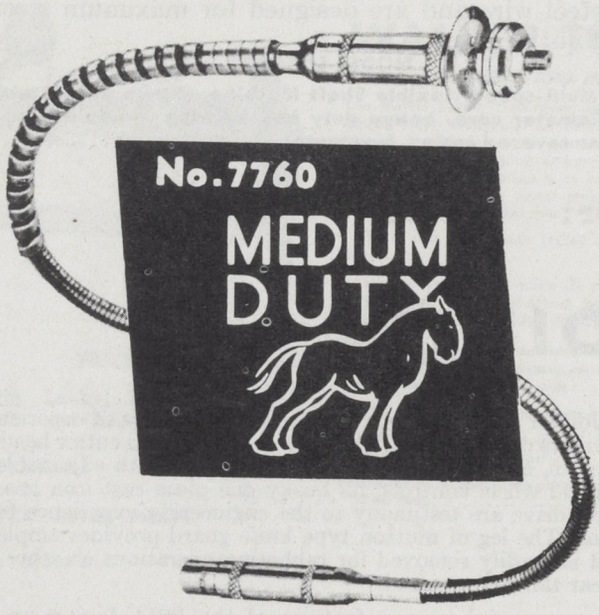
Net Price: less motor: $190.37 Net Price: $8.01

FLEXIBLE POWER SHAFTS



HEAVY-DUTY FLEXIBLE SHAFT---is designed for continuous industrial or commercial production. Length 72". Capacity 3450 R.P.M. or higher . . . 1/2" H.P. or less. Handpiece is provided with a hand-grip molded to fit the hand. Spindle or arbor has 1/2" x 20 thread to accomodate any internal threaded tool having this size thread or hole. The flexible core is 3/8" in diameter and the outside casing is protected by a molded plastic covering. The motor coupling will accomodate 1/2" motor shafts.

List Price: $48.30



MEDIUM-DUTY FLEXIBLE SHAFT--is designed for medium duty in commercial or industrial work. Length 60". Capacity 1750 R.P.M. or higher. 1/3 H.P. or less. This Unit has the special feature of a hand guard to prevent slipping of the hand into the tool. Spindle or arbor has 1/2" x 24 thread to accomodate any internal threaded tool having this size thread or hole. The flexible core is 3/8" in diameter and is protected by a flexible steel casing. The motor coupling will accomodate 1/2" motor shaft.

List Price: $15.20



LIGHT-DUTY FLEXIBLE SHAFT---is designed for light commercial or industrial use. Length 50". Capacity 1750 R.P.M. or higher. 1/4 H.P. or less. The spindle or arbor has a 1/2" x 24 thread and will accomodate tools having this size thread or hole. The flexible core is 5/16" in diameter and is protected by a flexible steel casing. The motor coupling will accomodate 1/2" motor shafts.

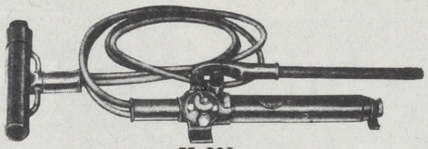
list Price: $9.35

These "FLEXIBLE POWER SHAFTS" are designed for rugged use on all types of metals, plastics, porcelain and wood--can be applied to hundreds of finished operations...wherever constant power in a portable tool is required.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

POWER PLUS
PUSH DOUBLE ACTING HYDRAULIC BODY JACKS PULL

4 TON "JUNIOR"
DIRECT PUSH and PULL HYDRAULIC



H-800

SPECIFICATIONS

Push	Pull	Closed Height	Ram Travel	Ram Weight
4 Tons	2 Tons	10"	5"	6 lbs.

H-800 Remote Control Jack embodies every feature required in a hydraulic unit. Ram made of seamless steel one piece tubing--Base and Ram head replaceable if threads ruined--Balanced ram with hose guard protection--

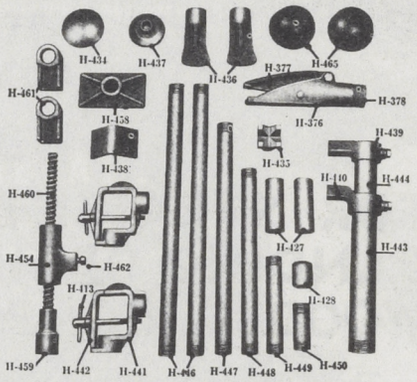
"PUSH" 4-Tons of concentrated pressure--WITH SAFETY--six foot hoses allow ease of operation in all directions--SAFETY VALVE CONTROLLED--prevents over-loading--PUMP OPERATES IN ALL POSITIONS.

"PULL" 2-Tons--DIRECT PULL--with PULL ADAPTERS--capable of withstanding full load of ram--SAVE TIME---SAVE MECHANICS--simple application for any problem---POWER FOR ALL JOBS.

4 TON JUNIOR Assembly Parts

G.A.C. 4-Ton Junior assembly parts — packed in carton complete as shown. An adapter for every type job in collision work.

Ram head and base, ¾" pipe thread, double strength tube used throughout.



#7-A Assembly Parts

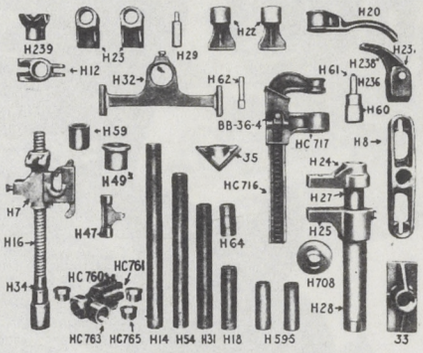
1—H 422 Spreader (H 376—H 377—H 378—H 379—H 380)	1—H 443 Steel Extension 10"
2—H 427 Special Coupling	1—H 444 R Extension 11"
1—H 428 Regular Coupling	2—H 446 18" Tubing
2—H 429 Fender Clamp Complete (H 441—H 442—H 413)	1—H 447 15" Tubing
1—H 434 Crowned Dolly	1—H 448 12" Tubing
1—H 435 Concave Head	1—H 449 6" Tubing
2—H 436 Spring Spreader	1—H 450 3" Tubing
1—H 437 Base for Jack	1—H 454 Speed Ratchet
1—H 438 V Head	1—H 458 Flat Head
1—H 439 Toe Clamp	1—H 459 Threaded Nut
1—H 440 R Toe Clamp	1—H 460 Adjusting Screw
	2—H 461 Pull Toe Clamp
	2—H 465 Flexible Rubber Head

#7-A Assembly parts are of sturdy construction, and will take the full load limit of the jack unit. Speed ratchet for extending without removal of unit from job, Spreader for tight and close work, Clamps for PULLING & SHRINKING---TOE CLAMPS for PULLING FULL LOAD OF UNIT.

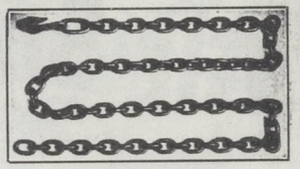
		Net Price
No. H-800	Remote Control Jack 4 Ton	$62.37
No. 7A	Assembly Parts complete	87.37

10-Ton
DIRECT PUSH and PULL HYDRAULIC
Assortment No. 10A

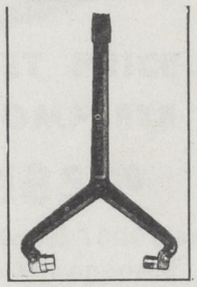
In this assortment you have complete equipment to not only straighten up a wrecked job, but to check it for alignment while doing the work and after it is finished.



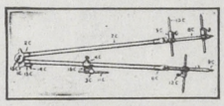
No. 5A Assembly Parts
Adaptable to H-200 and HC-700 Units



H-607 Six Foot Chain



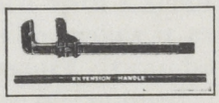
H-289 Universal Spreader



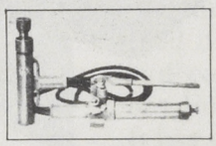
H-603 Checking Gauge



HC-758 Flex Heads HC-755



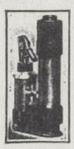
H-604 Bending Bar



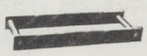
HC-700 Jack Unit



H-80 Spreader



H-200 Jack Unit



HP 50 New Press Adapter

1—No. HC-700 Remote Control Hydraulic Jack Unit	36	lbs.
1—No. H-200 Push and Pull Jack Unit	23	lbs.
1—No. 5A Assembly Parts complete	130	lbs.
1—No. H-616 Two Door Stand	118	lbs.
1—No. H-613 Four Post Press	127	lbs.
1—No. H-603 Power Plus Checking Gauge	10	lbs.
1—No. H-604 Perfection Adjustable Bending Bar	35	lbs.
2—No. H-607 Six Foot Chains	20	lbs.
1—H-289 Spreader	20	lbs.
1—H-80 Spreader	6½	lbs.
1—HC-758 Large Flexible Rubber Head 5"	4¼	lbs.
1—HC-755 Small Flexible Rubber Head 3"	1½	lbs.
Complete Assortment No. 10A Shipping Weight Boxes	531¼	lbs.

JACK SPECIFICATIONS	PUSH	PULL	CLOSED HEIGHT	RAM TRAVEL
HC-700 Remote Control	10 Tons	7½ Tons	12½"	6"
H-200 Jack	10 Tons	7½ Tons	12½"	6"

No. HC700	Remote Control Jack Only	Net Price	93.52
No. 5A	Tool Set Illustrated above	Net Price	163.55

No. 10A Assortment includes two jacks which are necessary on a lot of jobs, and the two spreaders which are a real necessity, in doing work on Modern cars. The H-80 Spreader is used for a short stiff bend and the H-289 Spreader is used for deep fenders and getting out the section on Modern Cars, where the cowl and fender jobs join. (This requires a narrow long tool with power to spread)

Jack Units threaded on top 1¼" Male pipe thread, base for 1¼" Female pipe thread.
With H-24, H-25, H-27 and H-28 you have another powerful clamping and spreading device which closes to 2¼" and can take work up to 17" both "push and pull" capable of taking full power without any side strain on the jack. With these fittings you have a small press of 10 tons capacity and by substituting H-32 for H-25, it gives you a good portable bending or straightening machine.

	Net Price
Complete Assortment No. 10A	$583.32

NEW SUNDSTRAND Single Pad Air Sander



Wet or Dry Model

NET PRICE COMPLETE

$107.50

OUTSTANDING FEATURES

STRAIGHT LINE PAD RECIPROCATION — easy to produce smooth, level surfaces free of pressure marks.

VARIABLE PAD SPEED — governor control provides pad speed range from 1500 to 3000 oscillations per minute . . . permits use of ideal speed for operation on material being sanded.

ANTI-FRICTION SLIDE BEARINGS — reduces friction and wear.

BUILT-IN WATER ATTACHMENT — controlled water supply for wet sanding.

SMALL AND COMPACT — easily handled by women operators.

PALM LEVER CONTROL — air and water both controlled by one lever.

COUNTERBALANCED PAD — eliminates fatiguing vibration.

LOW AIR CONSUMPTION — 5½ to 10 C.F. per minute, depending on speed.

FOR STRAIGHT - LINE SANDING OF *METAL... WOOD . . . COMPOSITION*

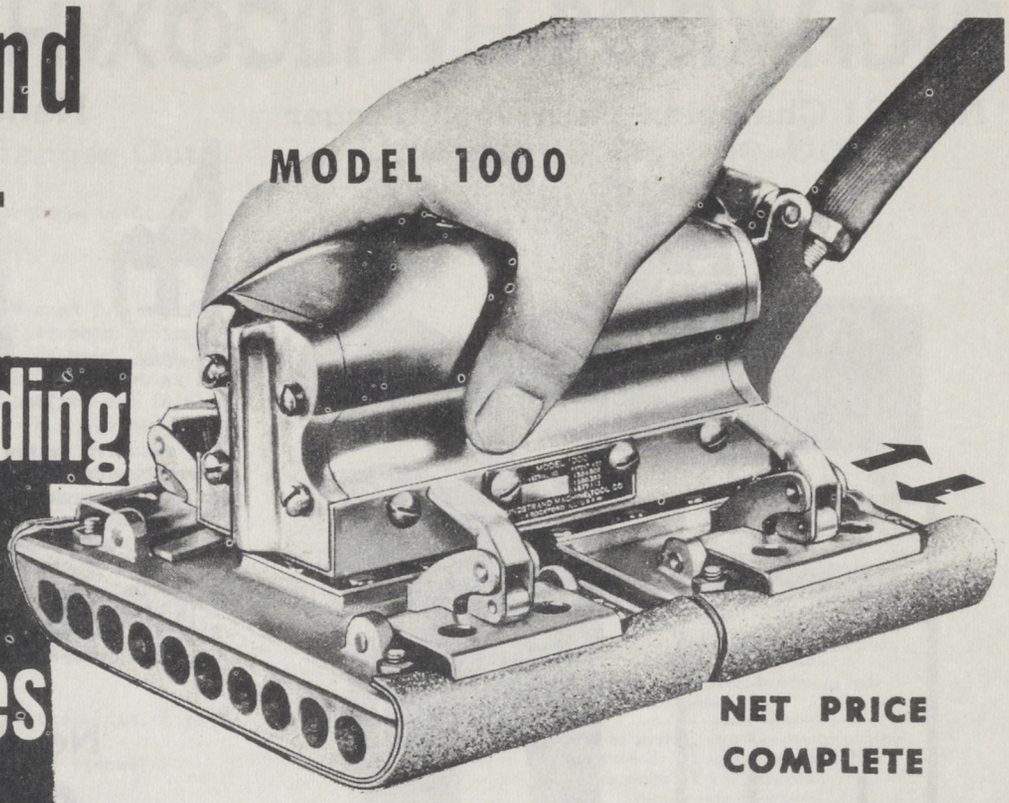
This is the new Sundstrand Single Pad Air Sander. It's small and compact . . . can be handled easily by women operators or in small and confining areas. It has straight line pad reciprocation at up to 3000 oscillations per minute, providing much greater sanding efficiency than by conventional hand sanding methods. Pad movement is counterbalanced to eliminate vibration and operator fatigue. Light in weight, it can be guided practically without effort over the surfaces to be finished, and the machine does the work.

SPECIFICATIONS

Weight	5½ lbs.
Length of Stroke	3/16″
Paper Capacity of Clips	4 to 6 sheets
Paper Refill Time	1/2 minute
Speed	1500 - 3000 oscillations per minute
Air Pressure Required	50 to 100 lbs.

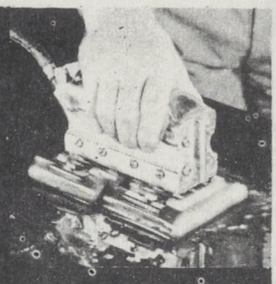
Sundstrand Sander

For Fast Sanding of Small or Large Surfaces



NET PRICE COMPLETE

$185.00



ON WOOD....

Sanding varnished and lacquered surfaces with oleum spirits and rubbing oil to produce a satin-like appearance.



ON METAL....

Filler sanding the cast iron column of a large vertical broaching machine.

ON COMPOSITION..

Smoothing composition tile and removing orange peel prior to application of finishing coats.

This is the Sundstrand Model 1000 Sanding Machine. It's small, it has opposed pad straight line reciprocation and is powered by air. It is provided with a small light weight housing which makes it easy to handle by women operators. It can be used on small surfaces or in cramped and confining areas. However, its value is not limited to sanding small surfaces. It has a high speed of 3000 pad oscillations per minute which permits the use of heavier grit abrasives than practical with hand sanding methods. Consequently, loading of abrasive is minimized and cutting efficiency increased. End thrust is cancelled out by the opposed pad oscillation eliminating vibration and operator fatigue. Suitable for either wet or dry sanding, the Sundstrand Model 1000 Sander with its numerous pad attachments can be adapted to practically any sanding operation whether surfaces are large or small, curved or flat, of wood, metal, plastic or composition.

SPECIFICATIONS

Weight	6 lbs.
Length of Stroke	1/2"
Number of Pads	2
Direction of Pads	Opposed
Paper Capacity of Clips	4 to 6 Sheets
Paper Refill Time (2 Pads)	1/2 Minute
Speed	3000 Oscillations Per Minute
Air Pressure Required	65 to 90 lbs.

Both Power and Speed in a Machine Weighing less than 6 lbs.

Better finishing can be accomplished with a sanding machine easily handled. That's why Sundstrand engineers designed the Model 1000 to weigh only six pounds. It can be guided practically without effort over the surfaces to be finished, and the machine does the work.

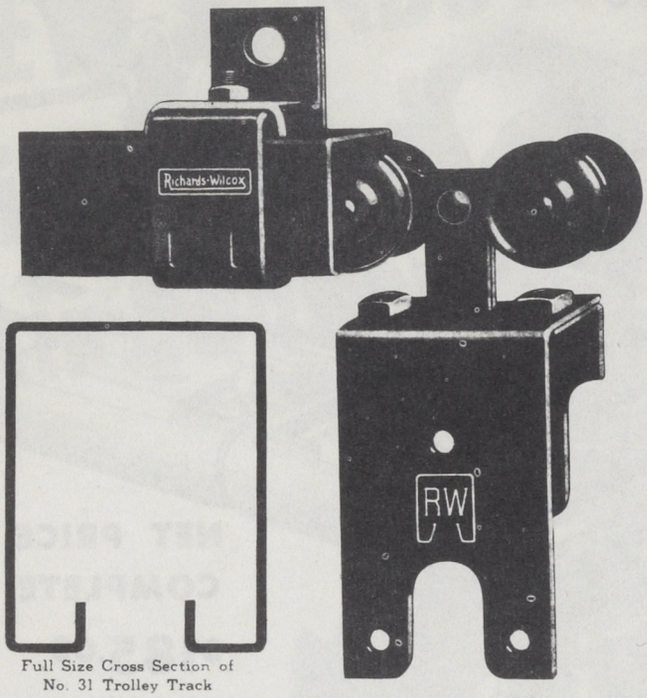
D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

RICHARDS - WILCOX HARDWARE

No. 321 Champion Barn Door Hanger

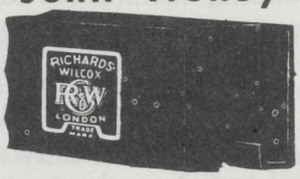
For doors weighing up to 300 pounds



Full Size Cross Section of
No. 31 Trolley Track

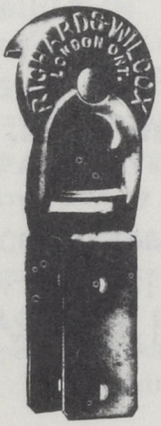
CANADA'S BEST BARN DOOR HANGER. The only flexible trolley hanger which brings the door up within one inch of the bottom of the track.
WHEELS. Heavey pressed steel rollers, insuring smooth and easy operation.
FLEXIBILITY. Completely flexible at the joint, allowing the door to swing in the wind.
ADJUSTMENT. Ample lateral adjustment to make a tight fit against the building. Apron 6 inches long, 3½ inches wide, adjustable for door 1¾ inches to 2⅛ inches thick.
PACKED. One pair in a box with cadmium plated bolts, blinds for end brackets and clip to make Lock Joint bracket.

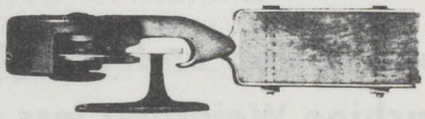
Lock Joint Trolley Track



Canada's most popular Trolley Track is made from Copper Bearing Steel which has been proven to last 6 times as long as some grades of ordinary steel sheets.
Made in 6, 8 and 10 ft. lengths.

No. 843 "King" Flat Track Hangers





Side View

No. 843 Hanger has malleable hood, steel apron, roller bearing wheel.

Oil hole in hood.

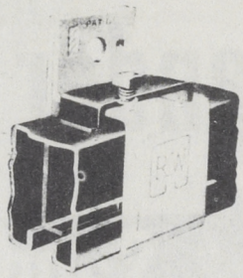
Finished in black enamel.

One pair in box with bolts.

Hanger Brackets



No. 21 x 31
Joint Bracket

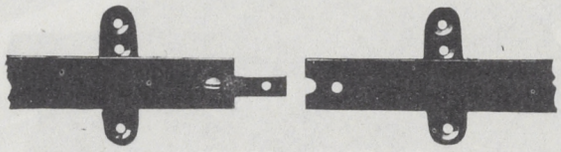




No. 22 x 31
Centre Bracket

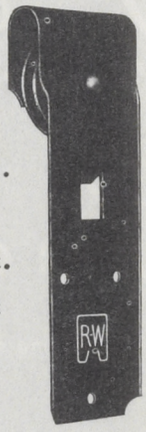
The standard centre bracket No. 31 Track is No. 1x31.
Every bracket can be converted into a lock joint bracket or an end bracket with the fittings packed with every pair of hangers.
Made of heavy steel and securely riveted.
For doors of ordinary weight, use brackets at each end of track.
1 in the centre of a six-foot length of track.
2 in the centre of an eight-foot length of track.
3 in the centre of a ten-foot length of track.

No. 50 Flat Track



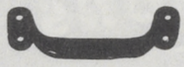
No. 50 TRACK. Used with No. 843 Hangers: 1 1/4 x 3/16 rail with brackets every foot; 6, 8 and 10 foot lengths. Ten lengths in a bundle.

No. 37 Flat Track Hanger



This Hanger uses No. 50 TRACK described above.
One piece pressed stell apron. Hanger is 11 inches long over-all by 3⅛ inches wide.
Wheel is grey iron, roller bearing.
Lug below wheel prevents hanger jumping track.
Finished in black enamel.
Packed one pair in a box with bolts and track joint connection.

Bow Handles



No. 81-1-2



No. 80

The Ideal Bow Handles to use with Richards-Wilcox doors.
Made of grey iron and finished in black enamel.

No.	Height Overall	Width Overall	Depth
80	6¾"	1⅛"	1 5/8"
81-1	6¼"	1⅜"	1½"
81-2	7 5/8"	2"	2"

RICHARDS - WILCOX HARDWARE

No. 736 Globe Swivel Hanger Outfit

Three-door round the corner a low-priced outfit

(Reversible right or left)



Vertical and Lateral Adjustment

This is designed to meet the demand for a cheap garage door outfit. It is better than ordinary hinges because the doors will not bind, warp or sag. Being hung on flat track, it is not as satisfactory as a trolley track outfit, and is not recommended for first-class work. Minimum headroom 7 inches.

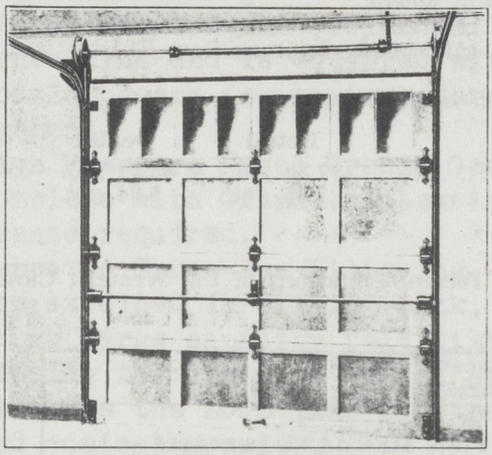
No. 736 runs on No. 50 (1 1/4 x 3/16) flat track. The curve is made by bending a length of track on a radius of 30 inches.

These hangers may be used for one, two or three or more doors.

No. 736-22 Three Door Outfit, including three No. 735 Hangers 22 feet Track, three pairs Hinges, three Stay Rollers, two Handles, one Safety Hasp, and screws complete.
No. 736-18 Set. Same except 18 ft. Track.

No. 736-4 Door Sets are same as above with the addition of, 1 only 735 Hanger and 1½ pair of Strap Hinges.
The Track for above sets is supplied in three pieces.

No. X5 Standard Rolltite Doors



This No. X5 Standard is the first grade Rolltite Door for use on openings up to 90 Square feet.

SPACE REQUIREMENTS

Headroom--12½ inches. (14 inches recommended)
Side wall--3 ins. Post between two openings, 5¾ ins. minimum.

SPECIFICATIONS

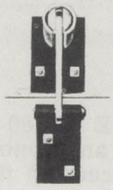
Doors--1¾ ins. thick.
Hardware--Ballbearing guide rollers with floating axles, eliminate binding. Heavy adjustable oil-tempered spring. Guide tracks of Copper bearing steel. 5/16" extra flexible steel cables, galvanized. Large 7 ins. winding drums. Ball-bearing shaft journals. "Cross-the-door Latch" Cylinder Lock.
Black enamel finish.

No. 2 "Heavy Duty" Rolltite Doors

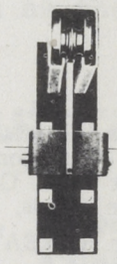
No. 2 Heavy Duty Rolltite is made to give long life and satisfactory operation in large openings or for heavy service conditions.
It is recommended for Service Station Doors over 90 feet square and for industrial purposes.
Large Rolltite Doors work just as easily as small ones because the entire set of hardware is properly designed for large and heavy doors.
Similiar in Design to No. X5 but with much better and heavier equipment.
Doors over 120 square feet have geared hand chain and sprocket ensuring easy operation and perfect control

One-Piece Garage Door

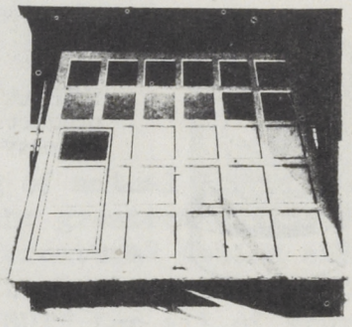
No. 80 "TILT-IN"



Horizontal tracks and top rollers as supplied with Sets No. 80 and No. 80D.



Horizontal tracks and rollers as supplied with sets No. 80 DT, 80-2, 80-3.



No lifting--just a slight push or pull.

Perfect counterbalance in all positions.

Easy to install--no header or jambs required. Hardware attaches to edge of 1¾" frame.

Low headroom requirements, only 6" on standard door.

Stock sets easily adjustable for various sizes.

For all "Single-Car" openings up to 9'0" wide by 8' 6" high (Max.) weighing not over 160 lbs., up to 1¾" thick.
SPACE REQUIREMENTS: Headroom--6" Sidewall--10" each side. If not available weights can be hung on back wall--only 3" sidewall space required in this case. (See set No. 80R)
Two or more openings in a row require only a 5" post between, assuming weights hung at back.
This is the standard set for all ordinary openings. Can be used with a new one piece door or existing swing or sliding doors.
Standard set is quickly adjustable for all sizes up to maximum shown.
Set consists of tracks, rollers, corner brackets, pulleys, cables, top spring bolt, pull down handle, rubber bumpers, two reinforcing angles (5'-6" long) and two heavy galvanized weight containers.

TILT-IN Hardware Set. No.	Space Required Min. Head Room	Space Required Min. Side Space	Maximum Door Size Wide	Maximum Door Size High	Max. Door Wgt. Lbs.
No. 80	6"	10½"	9"	8"	160
No. 80 R	6"	3"	9"	8"	160
No. 80 D	6"	10½"	Not	8"	200
No. 80 DT	6"	10½"	Over 120 Sq. Ft.		260
No. 80-2	7½"	10½"	10"	10"	260
No. 80-3	9½"	12"	12"	12"	450

RICHARDS - WILCOX CODE

All Richards-Wilcox merchandise is backed by their Code.
1. To leave nothing undone that care, skill and effort can suggest toward making dependable hardware.
2. Never to sacrifice dependability for a profit by the use of inferior materials or workmanship.
3. To price our merchandise fairly and to advertise it truthfully.

In these two pages we have only listed the regular stock lines. If you do not find the information or product you are interested in, please write.

D. ACKLAND & SONS LTD.

for illustrated pamphlets showing prices and all the Richards - Wilcox lines.

CANADIAN INDUSTRIES C-I-L LIMITED

WEED CONTROL CHEMICALS



HERBATE — Ester

HERBATE AMINE has 80 ounces of 2,4-D acid per gallon. This highly concentrated product will give an economical weed control. HERBATE is recommended mainly for easy-to-kill weeds in flax and corn.

	Retail	Dealer
5 Imp. gal, can	$7.25 gal.	$5.80 gal.



HERBATE — Amine

HERBATE Ester is one of the most popular formulations of 2,4-D used by farmers today. HERBATE Ester contains 64 ounces of 2,4-D acid per gallon. Compare the cost of control per acre. One gallon of this concentrated product will control 21 acres of susceptible weeds.

Other reasons why HERBATE Ester is gaining in popularity:

—Gives quick kill on most susceptible weeds.
—Effective even when followed by rainfall.
—More effective control on hard-to-kill weeds such as Sow Thistle and Canada Thistle.
—Formulated to prevent precipitation in hard water.

	Retail	Dealer
1 Imp. gal. can (4 per case)	$7.80 gal.	$6.24 gal.
5 Imp. gal. can	7.45 gal.	5.94 gal.

The following rates of HERBATE application are based on the recommendations of the Western Canadian Weed Control Conference.

Type of Weed and Reaction to 2,4-D	Formulation	Wheat, Oats, Barley, Rye	Flax
		Pints HERBATE per Acre	
Annual Weeds (susceptible)	Ester	3/8 to 5/8	1/3 to 1/2
	Amine	1/3 to 7/10	3/10 to 1/2
Annual Weeds (intermediate)	Ester	1/2 to 1	3/8 to 5/8
	Amine	1/2 to 1	2/5 to 7/10
Perennial Weeds (top growth control)	Ester	1/2 to 1	3/8 to 5/8
	Amine	1/2 to 1	2/5 to 7/10

Cereal Crops—Spraying should commence as soon as the crop has reached the three-leaf stage or about six inches high. It is not safe to treat during the early shotblade stage.

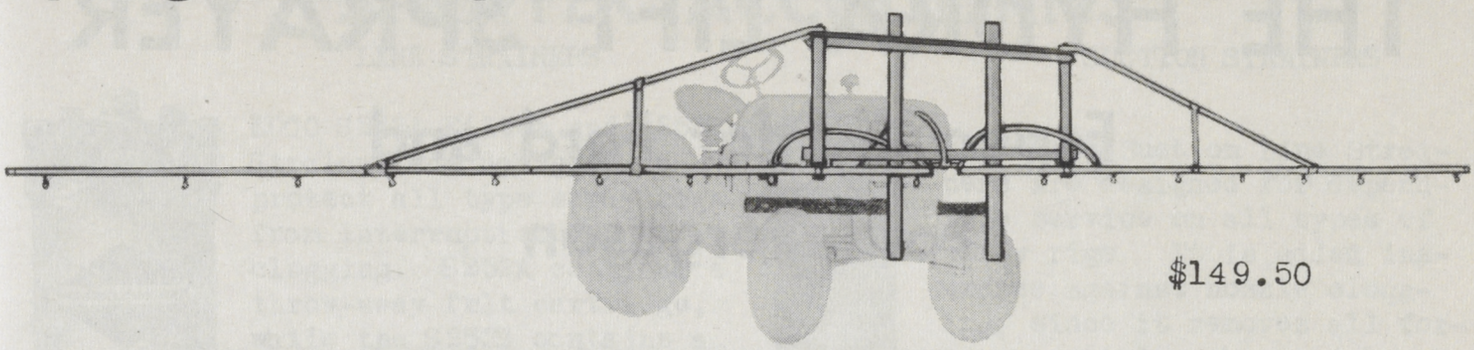
Flax—Provided weed growth warrants it, spray after the four to five-leaf stage of flax growth and not after the early bud stage.

Conversion Table to determine the volume of HERBATE which contains a specific number of ounces of 2,4-D acid.

Ounces of 2,4-D Acid	3	4	5	6	7	8	9	10	16
Pints of HERBATE Ester	3/8	1/2	5/8	3/4	7/8	1	1-1/8	1-1/4	2
Pints of HERBATE Amine	3/10	2/5	1/2	3/5	7-10	4/5	9/10	1	1-3/5

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

MODEL 50 FIELD SPRAYER



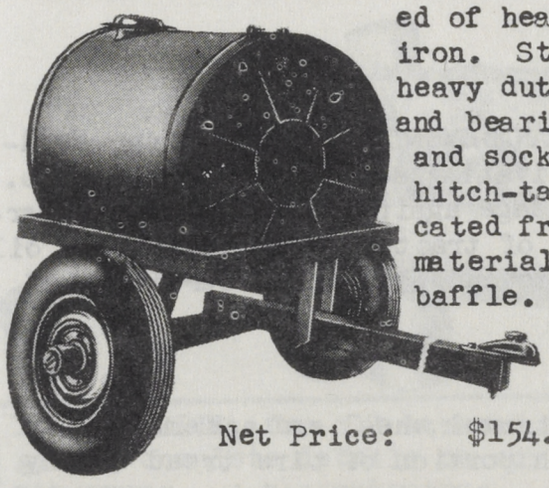
$149.50

This design has been selected, after careful testing of actual operations over the past three (3) years, as the SPRAYER that pays the greatest dividends for those who desire economical spraying. Compare the structural design and quality of the MODEL 50. The MODEL 50 is equal to the best in the field. The MODEL 50 is recognized all over Canada as the "BEST BUY" for all of your Spraying needs.

Check the many outstanding features

Designed for maximum efficiency and economical coverage---32 foot span.
Sturdy Steel Booms--folds to 6 feet for travelling and is equipped with welded nozzle bosses for maximum thread engagement.
High Pressure Naval Bronze Gear Pump complete with Graphital bearings--No grease required.
Improved Three Way Filtering--All fluids are strained in filling tank, then through large capacity felt filter and finally through fine nozzle screens Features the EDCO line of strainers and conical nozzles.
Universal Mounting Frame. Readily adaptable to most tractors.
Front Frame--Angle iron construction, adjustable width to fit all tractors or trailers and adjustable to spray all heights of crops.
By-Pass valve can be set at any required pressure and supplies ample agitation to keep chemicals properly mixed.
P.T.O. Drive is standard equipment but may be operated with pulleys and belts.
Shipping weight approx. 160 lbs.--Sprayer is complete except for tank-ready to mount on Tractor---Finish is in Green Enamel.

CONVERT YOUR TRACTOR MOUNT SPRAYER into a self contained unit. This trailer tanker unit is designed to fit all makes of tractor models. Trailer sturdily constructed of heavy angle iron. Standard heavy duty wheels and bearings. Ball and socket type hitch-tank fabricated from 14 ga. material. Centre baffle. 150 Gals. capacity.



Net Price: $154.25

By using the "MODEL 50" Sprayer mounted on the Trailer Tank illustrated at left, will give you a Trailer Model Unit. This Unit is operated direct from power take off. By the addition of a Gas Engine, the Unit will become a self-contained Unit.

Model"C" Sprayer and Trailer Tank
Net Price: $303.75
Model "D" Above with addition of Gas Engine: Net Price: $359.75
Tires and Tubes Extra.

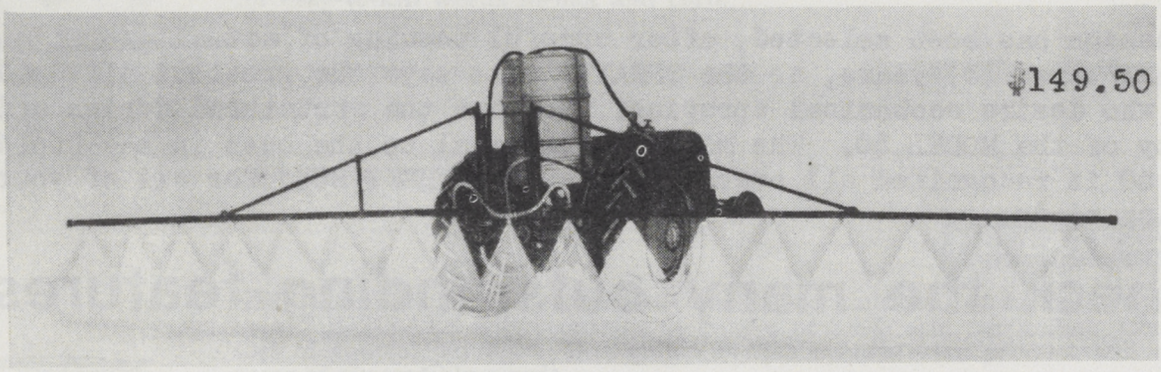
IMPORTANT
Manufacturer's Guarantee guards against faulty workmanship and materials.

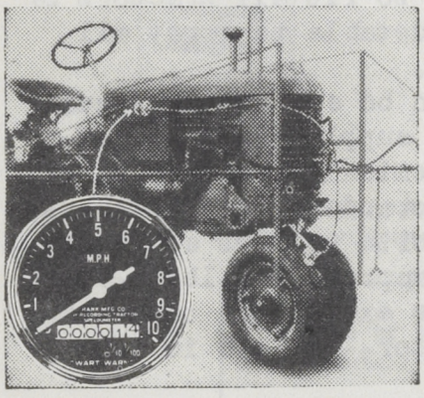
D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

THE HYDRA LIFT SPRAYER

Especially for Ford and Ford-Ferguson





Low Recording Tractor Speedometer

A high standard accurate speedometer, with built in heat change compensating factors. Accurate as to odometer reading which registers in miles as well as in tenths and hundreds of miles. Guaranteed to do no harm to clock mechanism even though tractor travels at 30 MPH. Clock mechanism guaranteed against defective material or workmanship for 90 days or 4000 miles, whichever occurs first.

IN SPRAYING---SPEED CONTROLS DOSAGE. Provides savings by eliminating overdosing from too slow travel, or undercoverage from too fast travel.

IN SEEDING---Assures better distribution through control of speed.

IN COMBINING---Increase grain yield by controlling speed. Eliminates going too fast giving you maximum harvest and grain free from dirt and chaff. Tells you when you are going too slow. Saves valuable time.

IN CUSTOM WORK--- Tells miles travelled; know how many acres averaged per day even though the work involves hills and contour farming. Aids in determining fuel costs.

IN FARM MANAGEMENT---Keep plowing, seeding, cultivating and harvesting records. Check mileage against fuel costs and service life of tractor. Also, guide to oil change time and periodical servicing of tractor.

Unit includes clock with attaching clamp, cable, travel wheel and assembly with mourting support bracket. Adaptable to the smooth portion of tire tread of any Farm Machine. Easily installed.

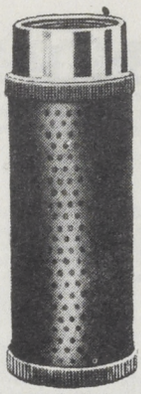
SPRAYER ACCESSORIES

LINE STRAINERS



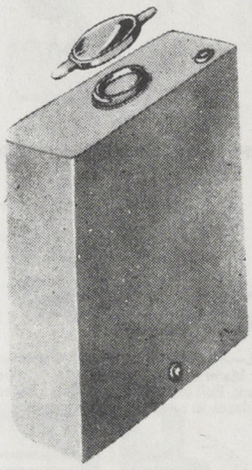
EDCO S252A Filter and S252S Strainer are designed to protect all type spray rigs from interruption due to clogging. S252A contains a throw-away felt cartridge, while the S252S contains a monel wire cloth cartridge, both are interchangeable within the same assembly.

SUCTION STRAINERS



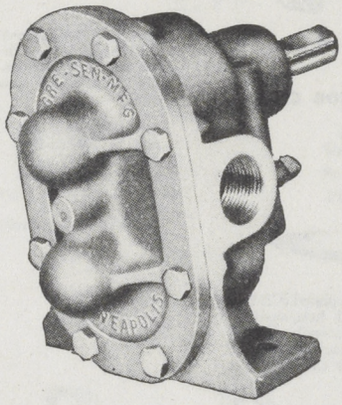
EDCO H-88 Suction Line Strainers are designed for dependable service on all types of spray rigs. It is added insurance against nozzle clogging, since it removes all foreign particles when supply tank is filled. An outstanding feature in design permits emptying of a container 99.9%.

80 GALLON TANK



Specially designed for mounting on tractor draw bars. Equipped with quick removable lid for filling. Fabricated from 14 gauge iron.
Size 42"x15"x36"
Outlets: 1/2"
Also available in tanks of 150 gallon capacity.

THE GRE-SEN AGRI-SPRAY GEAR TYPE PUMP



These units are capable of delivering ample gallonage and pressure at PTO speeds of 400 to 500 rpm. Sizes, 2 to 15 gallons.

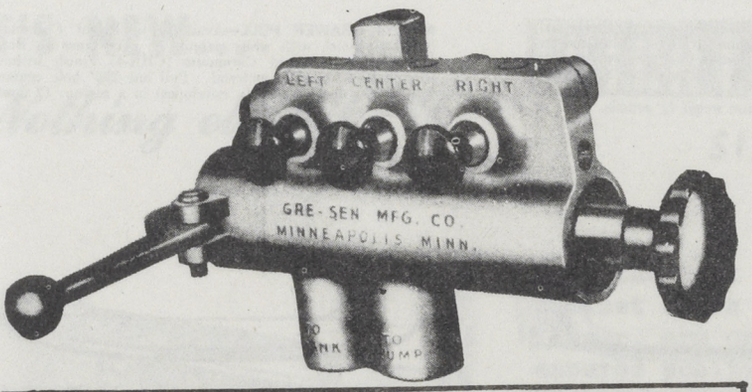
FEATURES

All bronze castings, stainless steel shafts, naval bronze gears, patented seal, eliminating packing and packing nut, incorporates Graphitar bearings, no grease required.

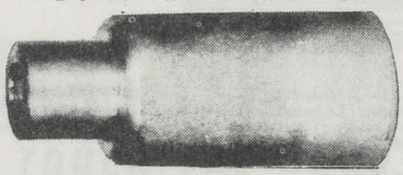
No.	RB	50	1/2"	4 G.P.M.
No.	RE	50	1/2"	7 G.P.M.
No.	RG	75	3/4"	9 G.P.M.
No.	RG	100	1"	12 G.P.M.

MODEL "B" FLOW CONTROL

Modernize your sprayer with the addition of this "Flow Control" Incorporates a pressure regulator and suck back valve, a Venturi valve for instant and positive drip control, will eliminate costly over dosage during mid-field stops and chemical wastage while turning your machine at row ends, "off and on" valve will allow boom shut-off, right or left hand as required.



POWER TAKE OFF COUPLER



SE 18 for 1 3/8 Power Take off Shaft.
3818 Adapters for 1 1/8" Shaft.

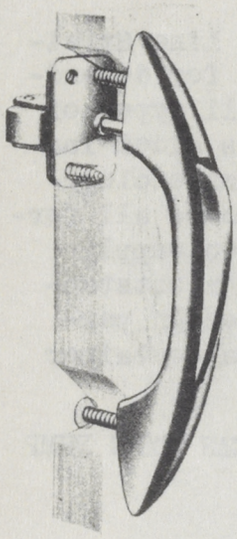
SPRAY NOZZLES

A complete stock of nozzles, such as EDCO, TEEJET and SPRAYJET are carried in stock at all times. Available in 1/8" or 1/4" male thread.
Interchangeable tips for gallonage.

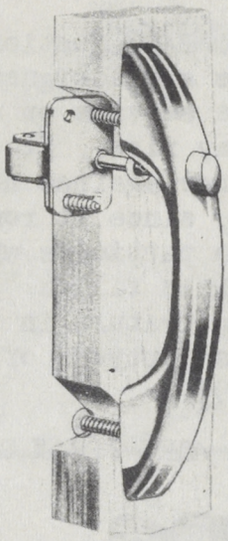
PLEASE WRITE, for illustrated Pamphlets giving complete details on our "FIELD SPRAYERS" and "ACCESSORIES".

KITCHEN CABINET HARDWARE

KITCHEN CABINET CATCHES AND PULLS



N61-225 CATCH



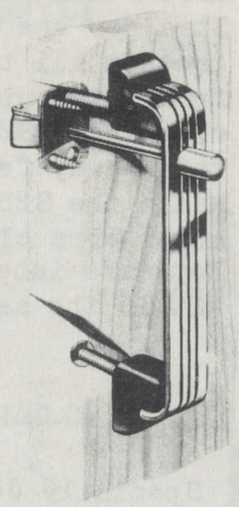
N61-308 CATCH

N61-225 CATCH—Push Button Type—furnished Bright Chromium (CHR-4) on Brass Materjal, Bright Brass (BP-4) and Lacquered on Brass or Dull Bronze (BRZ-6) on Bronze Material. Catches may be applied to flush or offset doors varying from ½" to 1⅛" in thickness. Catch is reversible. Packed one dozen envelopes in a carton; 12 dozen in a case weighing 31 lbs.

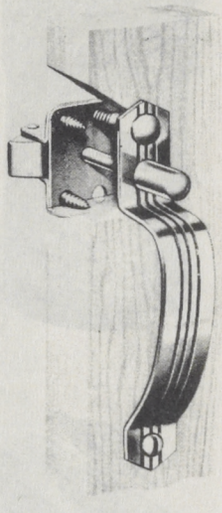
N61-308 CATCH—Positive easy action catch unit. Bright Chromium (CHR-4) finish, with white, red, black or plain lines. Packed in envelopes complete with all parts, screws and instruction sheets. One dozen envelopes are packed in a carton; 12 dozen in a case, weigh 31 pounds.

N61-6303 CATCH—Push Button Type. Constructed of steel with plastic ends. Heavily Chromium (CHR-4) Plated. Black or red lines with colored plastic ends to match. Screws fasten directly into metal handle. Packed in envelope complete with all necessary parts, screws and instruction sheets. One dozen catches in a carton; 12 dozen in a case weigh 41 pounds.

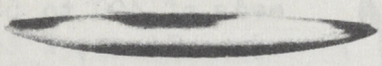
N61-3333A CATCH—A low priced Cupboard Door Catch made of Steel and finished in Bright Chromium (CHR-4). Supplied with red or black lines. Also available without painted lines. Packed one dozen in a carton. 12 dozen in a case weigh 32 pounds.



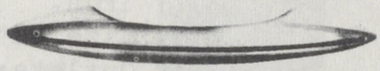
N61-6303 CATCH



N61-3333A CATCH



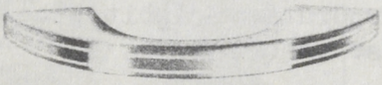
N61-200 DRAWER PULL—Heavily chromium plated (CHR-4) on Brass Material; Bright Brass (BP-4) and Lacquered on Brass or Dull Bronze (BRZ-6) on Bronze Material. Packed in envelopes with screws for wood thicknesses varying from ½" to 1⅛". Holes are on 2¾" centers. One dozen envelopes in a carton; 12 dozen in a case, weigh 19 pounds.



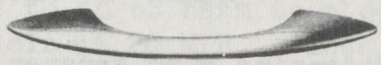
N61-201 DRAWER PULL—Available in Bright Chromium (CHR-4) Finish on Brass Material. Has embossed line which is painted white, red or black. Pull has 2¾" hole centers. Packed one dozen in a carton; 12 dozen in a case weigh 19 pounds.



N61-167 CUPBOARD DOOR PULL—Made of steel and supplied Bright Chromium (CHR-4) Finish with red or black lines or without painted lines. Screws are applied from front of handle. Packed one dozen in a carton; 12 dozen in a case weigh 12 pounds.



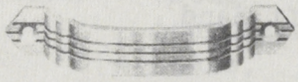
N61-298 DRAWER PULL—Matches N61-308 Push Button Catch. Bright Chromium (CHR-4) Plated on Brass and furnished with White, Red, Black or Plain lines. Has 2¾" hole centers. One dozen in a carton; 12 dozen in a case weigh 20 pounds.



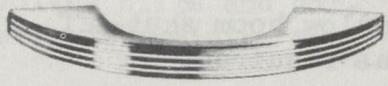
N61-209 DRAWER PULL—Of streamlined design, Bright Chromium (CHR-4) on Brass material. Mounting holes 2¾" on centers. One dozen in a carton; 12 dozen cartons in a case weigh 16 pounds.



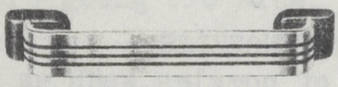
N61-169 DRAWER PULL—Furnished in Bright Chromium (CHR-4) on Brass Material. Embossed lines are plain, not painted. Has 2¾" hole centers. One dozen in a carton; 12 dozen in a case weigh 22 pounds.



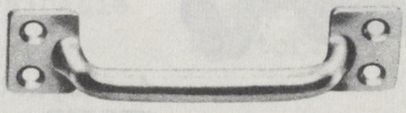
N61-158B DRAWER PULL—Made of Steel and furnished Bright Chromium (CHR-4) with red or black lines or without painted lines. Screws applied on front of handle. This pull matches N61-3333A Push Button Catch. Packed one dozen in a carton; 12 dozen catches in a case weigh 12 pounds.



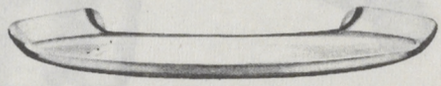
N61-218 DRAWER PULL—Available in Bright Chromium (CHR-4) Finish with white painted or plain lines on Brass Material or in Bright Chromium (CHR-4) Finish without painted lines on steel material. Pull has 2¾" hole centers. Packed one dozen pulls (In envelopes) in a carton; 12 dozen in a case weigh 20 pounds.



N61-8212 DRAWER PULL—Matches N61-6303 Push Button Catch. Made of steel and has colored plastic ends to match red or black colored lines. Holes are on 3" centers. Screws fasten directly into metal. Packed one dozen in a carton; 12 dozen in a case weigh 20 pounds.

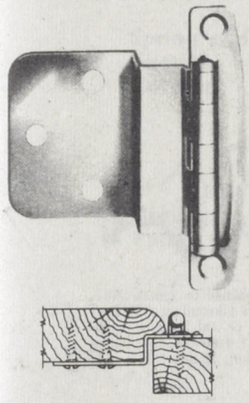


N65-217 SASH LIFT—A Cast Brass Lift available in Bright Chromium (CHR-4) or Dull Brass (BP-6) and Bright Brass (BP-4) finishes. Packed one lift with screws in an envelope. One dozen in a carton; 12 dozen in a case weigh 29 pounds.



A61-289 DRAWER PULL — Zinc Die Cast with Bright Chromium (CHR-4) Finish. Hole centers are on 2¾" centers. Packed 2 dozen in a carton with screws, individually wrapped in tissue; 24 dozen in a case weigh 42 pounds.

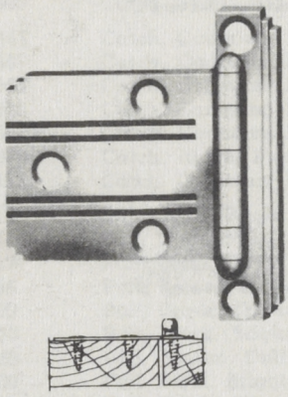
KITCHEN CABINET HARDWARE



N58-2390E ⅜″ inset.
N58-2390M ½″ inset.
N58-2390D ¾″ inset.
Steel—Bright Chrome (CHR-4)
Prime Coat (ENM-10)
Brass—Bright Chrome (CHR-4)
dozen pair. Bright Brass (BP-4)

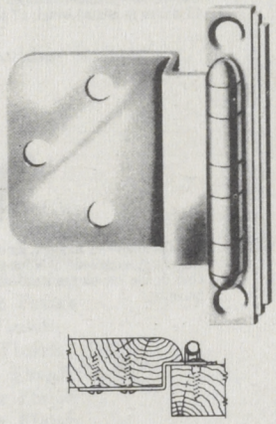
Bronze—Dull Bronze (BRZ-6)

Packed 1 dozen pair in a carton,



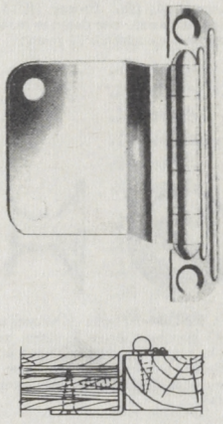
N58-035 Surface Type for flush doors.
N58-035B ⅜″ offset.
White, Red, or Black Painted Lines.
Steel—Bright Chrome (CHR-4)
Chrome (CHR-4) without painted lines

Packed 1 dozen pair in a carton,



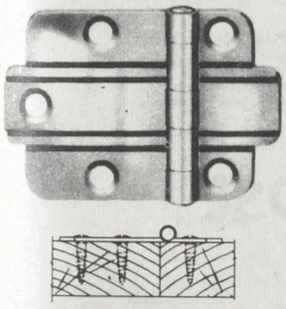
N58-2364E ⅜″ inset.
N58-2364M ½″ inset.
N58-2364L ⅝″ inset.
N58-2364D ¾″ inset.
Steel—Bright Chrome (CHR-4)

Packed 1 dozen pair in a carton.



N58-2357F for ¾″ flush doors.
Steel—Bright Chrome (CHR-4)
Prime Coat (ENM-10)

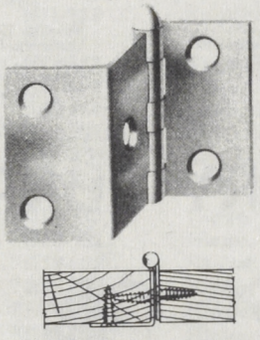
Packed 1 dozen pair in a carton,



N58-032 Surface type for flush doors.
N58-032B ⅜″ offset.
White, Red, or Black Painted Lines.
STEEL—Bright Chrome (CHR-4) with painted lines,
pair. Bright Chrome (CHR-4) without painted lines
Brass—Bright Brass (BP-4)

Bronze—Dull Bronze (BRZ-6)

Packed 1 dozen pair in a carton,



N58-052 for ¾″ flush doors.
Steel—Bright Chrome (CHR-4)
Prime Coat (ENM-10)

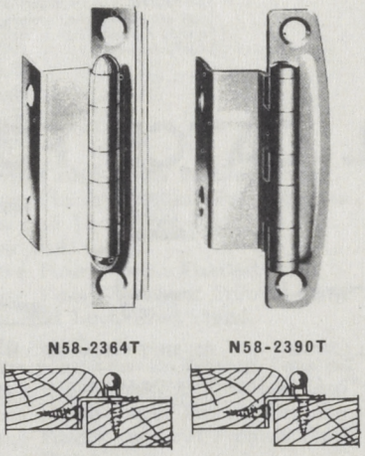
Packed 1 dozen pair in a carton,

N58-2364T ½″ or greater inset.
Steel—Bright Chrome (CHR-4)

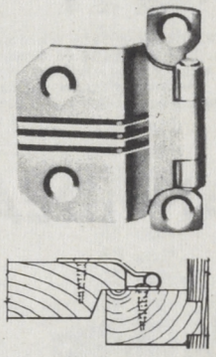
Packed 1 dozen pair in a carton

N58-2390T ½″ or greater inset.
Steel—Bright Chrome (CHR-4)

Prime Coat (ENM-10)
Packed 1 dozen in a carton,



N58-2364T N58-2390T



N58-2354A ⅜″ offset.
With or Without Red or Black Lines.
Steel—Bright Chrome (CHR-4) with lines
pair. Bright Chrome (CHR-4) without lines

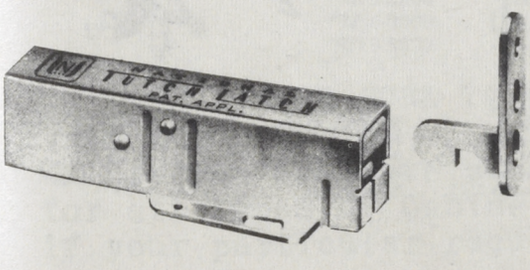
Packed 1 dozen pair in a carton,

IT'S NEW...

Nothing else like it

TUTCH LATCH

SIMPLY TOUCH THE DOOR... IT OPENS AUTOMATICALLY



It's the talk of the town, this outstanding latch opens cabinet doors AUTOMATICALLY, with a gentle touch of the finger, arm or elbow. TUTCH LATCH is not a catch. It assures positive latching action, whether door is slammed shut or closed gently. Designed especially for use on wooden kitchen cabinets, it will assure many years of smooth, easy positive action.

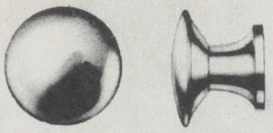
Retail Price each: .65

D. ACKLAND & SON, Limited

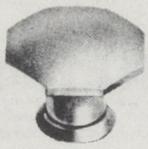
Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

KITCHEN CABINET HARDWARE

CABINET KNOBS—SPRING AND FRICTION CATCHES



N61-048 KNOB—1″ Diameter Round Hollow Metal Knob. Available Bright Chromium (CHR-4), Bright Brass (BP-4) and Lacquered, Dull Bronze (BRZ-6). Envelope packaged—one dozen in carton; 12 dozen in a case weigh 13 pounds



N63F2123 KNOB—Solid Metal Octagon Design—Bright Chromium (CHR-4) Finish. One dozen envelopes in a carton; 12 dozen in a case weigh 17 pounds.



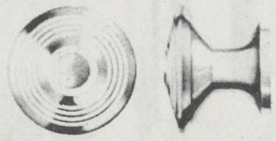
N61-478 KNOB—1″ Diameter Finished Bright Chromium (CHR-4). One dozen envelopes in a carton; 12 dozen in a case weigh 14 pounds.



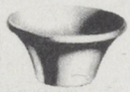
N61-241 KNOB—Bright Chromium (CHR-4) Finish on Brass Material with one white, black or red line. Knob is 1″ in diameter. One dozen envelopes in a carton; 12 dozen in a case weigh 13 pounds.



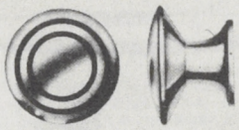
N63-X3015N—A modern Knob with concave face. 1″ diameter. Regularly supplied envelope packaged. Chrome plated (CHR-4). One dozen envelopes in a carton; 12 dozen in a case weigh 12 pounds.



N61-189 KNOB—Made to match N61-158B Pull. Bright Chromium (CHR-4) Finish with black or red lines or without painted lines if desired. One dozen envelopes in a carton; 12 dozen in a case weigh 13 pounds.

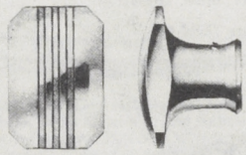


N63-X3016N—A 1½″ diameter concave Knob finished in Bright Chromium (CHR-4). One dozen envelopes in a carton, 12 dozen in a case weigh 16 pounds.



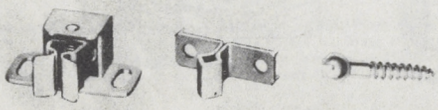
N61-242 KNOB—Bright Chromium Finish (CHR-4) applied on Brass Material, with two white, black, red, or plain lines. One dozen envelopes in a carton; 12 dozen in a case weigh 13 pounds.

Knobs similar to the two numbers shown above, are available in 2″ and 2½″ diameters in our Builders Hardware line. **A63-F3017N** is 2″ diameter, and **A63-F3018N** is 2½″ diameter. They are packed one dozen in a carton (no envelopes), and are finished Antique English, Bright or dull Brass, and Bright or Dull Chromium.



N61-484 KNOB—Solid Metal, Bright Chromium Finish with black or red lines, also available without painted lines. Packed one dozen envelopes in a carton; 12 dozen in a case weigh 15 pounds.

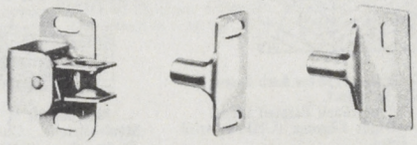
AN IDEAL CATCH FOR EVERY PURPOSE



N61-204T SNAP GRIP SPRING CATCH—(U.S. Pat. 2,244,344) Flexible pawls permit easy engagement of strike. Two types of strikes, as illustrated, are furnished with this catch. Catch has elongated holes for adjustment. Cadmium plated (CAD-1). Packed one dozen envelopes in a carton; 12 dozen in a case weigh 13 pounds.

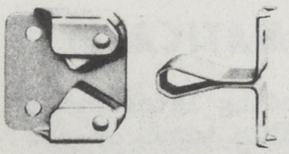


N61-3327T SPRING CATCH—Supplied with 3 different type strikes for various door applications. Instructions for applying enclosed in each envelope. Cadmium Plated (CAD-1). Packed one dozen in a carton; 12 dozen in a case weigh 12 pounds.



N61-356T CATCH—Furnished with 2 different types of strikes. Catch is applied to door and strike on door jamb. Positive action, easy adjustment. Cadmium Plated (CAD-1). Packed one dozen envelopes in a carton; 12 dozen in a case weigh 12 pounds.

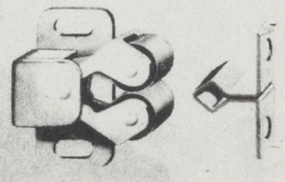
MODERN AS TOMORROW



N61-3396 SPRING CATCH—A spring catch of unusual rigidity and strength. Strike has marker prongs to facilitate installation. Cadmium Plated (CAD-1). One dozen envelopes in a carton; 12 dozen in a case weigh 13 pounds.



N61-3320 FRICTION CATCH—An inexpensive friction catch made of tempered spring steel. Cadmium Plated (CAD-1). Packed one dozen envelopes in a carton; 12 dozen in a carton weigh 10 pounds.



N61-336 CATCH (U. S. Pat. 2,244,-344). A quiet and flexible operating Catch with rubber rollers. Strike has marker prongs to facilitate installation. Cadmium Plated (CAD-1). One dozen envelopes in a carton; 12 dozen in a case weigh 15 pounds.



N61-3348 ELBOW CATCH—Furnished Nickel Plated (NP-1), Catch is fastened on cupboard door and strike under shelf. Packed one dozen envelopes in a carton: 12 dozen in a case weigh 8 pounds.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

KITCHEN CABINET HARDWARE
RETAIL PRICE LIST

Push Button Catches	*N61-225	Catch, Brass, Bright Chrome Finish	$0.95 each
	*N61-225	Catch, Brass, Bright Brass Finish	.95 each
	*N61-225	Catch, Bronze, Dull Bronze Finish	.95 each
	*N61-225	Catch, Steel, Bright Chrome Finish	.80 each
	N61-308	Catch, Brass, Bright Chrome Finish	.95 each
	N61-3333A	Catch, Steel, Bright Chrome Finish	.65 each
	N61-6303	Catch, Steel, Bright Chrome Finish	.75 each
Spring and Friction Catches	N61-204T	Catch, Cadmium Plated	.18 each
	N61-336	Catch, Cadmium Plated, Rubber Rollers	.35 each
	N61-356T	Catch, Cadmium Plated	.18 each
	N61-3320	Catch, Cadmium Plated	.12 each
	N61-3327T	Catch, Cadmium Plated	.18 each
	N61-3348	Catch, Nickel Plated	.15 each
	N61-3396	Catch, Cadmium Plated	.25 each
Drawer Pulls	N61-117	Pull, Steel, Bright Chrome Finish	.18 each
	N61-158B	Pull, Steel, Bright Chrome Finish	.25 each
	N61-167	Pull, Steel, Bright Chrome Finish	.25 each
	N61-169	Pull, Brass, Bright Chrome Finish	.50 each
	*N61-200	Pull, Brass, Bright Chrome Finish	.50 each
	*N61-200	Pull, Brass, Bright Brass Finish	.50 each
	*N61-200	Pull, Bronze, Dull Bronze Finish	.50 each
	*N61-200	Pull, Steel, Bright Chrome Finish	.35 each
	N61-201	Pull, Brass, Bright Chrome Finish	.50 each
	*N61-209	Pull, Brass, Bright Chrome Finish	.50 each
	*N61-209	Pull, Steel, Bright Chrome Finish	.35 each
	*N61-218	Pull, Brass, Bright Chrome Finish	.50 each
	*N61-218	Pull, Steel, Bright Chrome Finish	.35 each
	N61-298	Pull, Brass, Bright Chrome Finish	.60 each
	N61-821Z	Pull, Steel, Bright Chrome Finish	.50 each
Knobs	N61-032	Knob, Bright Chrome Finish	.18 each
	*N61-048	Knob, Bright Chrome Finish	.25 each
	*N61-048	Knob, Bright Brass and Lacquered Finish	.25 each
	*N61-048	Knob, Dull Bronze Finish	.25 each
	N61-189	Knob, Bright Chrome Finish	.25 each
	N61-241	Knob, Bright Chrome Finish	.30 each
	N61-242	Knob, Bright Chrome Finish	.30 each
	N61-478	Knob, Bright Chrome Finish	.30 each
	N61-484	Knob, Bright Chrome Finish	.30 each
	N63-F2123	Knob, Bright Chrome Finish	.30 each
	N63-X3015N	Knob, Bright Chrome Finish	.30 each
	N63-X3016N	Knob, Bright Chrome Finish	.35 each
Hinges	*N58-032	Hinge, Steel, Bright Chrome Finish—with Painted lines	.65 pair
	*N58-032	Hinge, Steel, Bright Chrome Finish—without Painted lines	.60 pair
	*N58-032	Hinge, Brass, Bright Brass and Lacquered Finish	.95 pair
	*N58-032	Hinge, Bronze, Dull Bronze Finish	.95 pair
	*N58-032B	Hinge, Steel, Bright Chrome Finish—with Painted lines	.65 pair
	*N58-032B	Hinge, Steel, Bright Chrome Finish—without Painted lines	.60 pair
	*N58-032B	Hinge, Brass, Bright Brass and Lacquered Finish	.95 pair
	*N58-032B	Hinge, Bronze, Dull Bronze Finish	.95 pair
	N58-035	Hinge, Steel, Bright Chrome Finish—with Painted lines	.65 pair
	N58-035	Hinge, Steel, Bright Chrome Finish—without Painted lines	.60 pair
	N58-035B	Hinge, Steel, Bright Chrome Finish—with Painted lines	.65 pair
	N58-035B	Hinge, Steel, Bright Chrome Finish—without Painted lines	.60 pair
	N58-052	Hinge, Steel, Bright Chrome Finish	.60 pair
	N58-052	Hinge, Steel, Prime Coat Finish	.30 pair
	*N58-1451B	Hinge, Steel, Bright Chrome Finish	.60 pair
	*N58-1451B	Hinge, Brass, Bright Brass and Lacquered Finish	1.35 pair
	*N58-1461B	Hinge, Steel, Bright Chrome Finish	.65 pair
	*N58-1461B	Hinge, Brass, Bright Brass and Lacquered Finish	1.65 pair
	N58-2354A	Hinge, Steel, Bright Chrome Finish	.50 pair
	N58-2357F	Hinge, Steel, Bright Chrome Finish	.60 pair
	N58-2357F	Hinge, Steel, Prime Coat Finish	.30 pair
	N58-2364	series — Hinges, Steel, Bright Chrome Finish	.60 pair
	*N58-2390	series — Hinges, Steel, Bright Chrome Finish	.60 pair
	*N58-2390	series — Hinges, Steel, Prime Coat Finish	.30 pair
	*N58-2390	series — Hinges, Bronze, Dull Bronze Finish	.95 pair
	*N58-2390	series — Hinges, Brass, Bright Brass and Lacquered Finish	.95 pair
	*N58-2390	series — Hinges, Brass, Bright Chrome Finish	.95 pair

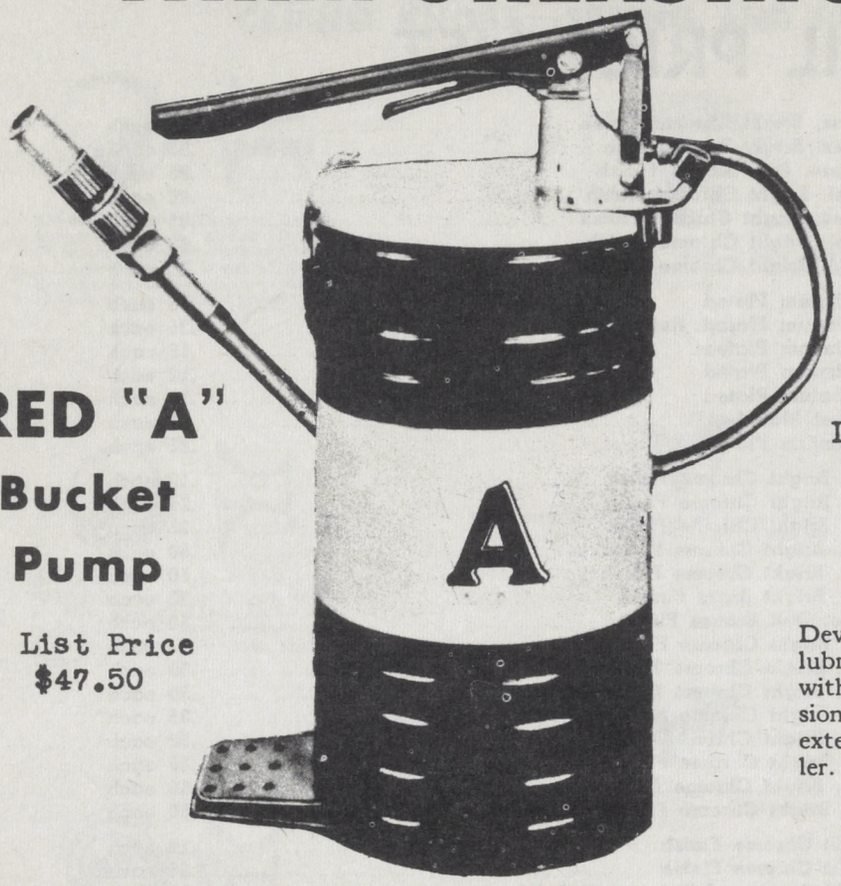
"BE SURE TO SPECIFY MATERIAL AND FINISH DESIRED"

We carry a complete stock of catches, drawer pulls, knobs and hinges for all types of Cabinet work. Please do not hesitate to contact us, if your particular requirements are not listed.

D. ACKLAND & SON, Limited

Head Office: WINNIPEG • Branches: DAUPHIN, BRANDON, CALGARY AND EDMONTON.

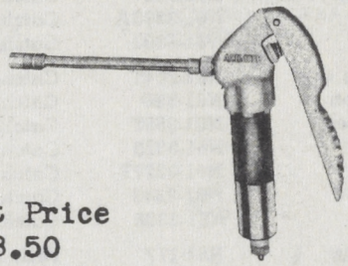
FARM GREASING OUTFIT



RED "A" Bucket Pump

List Price
$47.50

"DYN-O-MITE" Gun



List Price
$18.50

MODEL 7132

Features:

Develops up to 10,000 lbs. grease pressure. 2½ oz. lubricant capacity can service up to 55 bearings without reloading. Steel cylinder, handle, extension, cast aluminum head. Equipped with 8" pipe extension and snap-on Alemite Hydraulic Coupler. Weighs only 2 lbs.

with Detachable High-Pressure "Dyn-O-Mite" Gun! Delivers up to 10,000 lbs. Pressure

Amazing New "DYN-O-MITE" Gun . . . detaches from the hose for quick, positive greasing of hard-to-reach or overhead fittings. New one-handed push-handle action easily delivers up to 10,000 lbs pressure to "crack" frozen bearings. Will grease as many as 55 bearings without reloading . . . yet weighs only 2 lbs. The long, thin, hydraulic extension reaches through and around obstructions.

This "DYN-O-MITE" Gun . . . also attaches directly to the bucket hose for rapid grease delivery direct from the "Red-A" bucket pump . . . which develops up to 3,500 lbs. pressure without straining! When necessary, pressure can be quickly boosted up to 10,000 lbs.—by simply operating the hand-grip on the "Dyn-o-Mite" Gun. This combination allows rapid high-pressure, and volume delivery to any bearing, anywhere on the machine . . . anywhere on the farm.

DETACHES in a Jiffy! With a quick twist, the "Dyn-o-Mite" Gun "breaks free" from the hose coupler . . . loaded and ready for independent use. Easy, single-handed push-action gives 10,000 lbs. pressure with minimum effort. Snaps back onto hose coupler for quick, clean reloading.

MODEL 7136

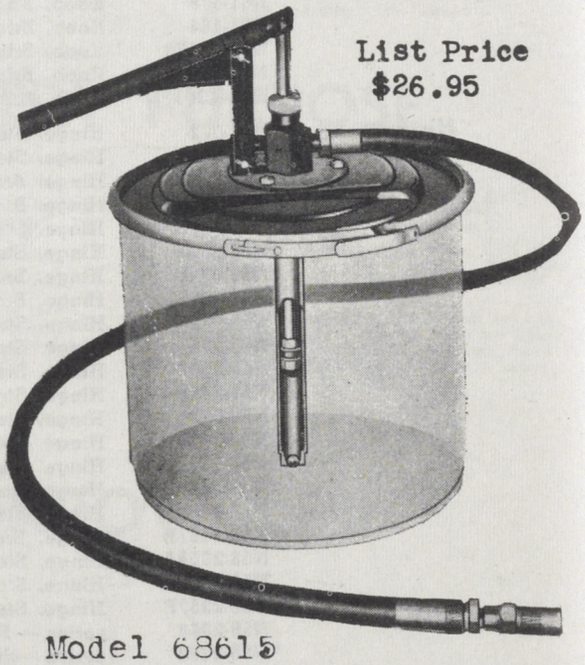
Features:

Rugged steel 25-lb. capacity tank. Lightweight, weighs only 14 lbs. Cast aluminum cover with quick-clamp hinges. Hanger bracket keeps coupler clean. Full-open-head for easy filling. Dynamic Primer gives positive priming. Equipped with bleeder relief valve. Handles light, medium, or heavy grease. Develops 3500 lbs. grease pressure. Includes 6 ft. hose with check valve and coupler

UTILITY PUMP

ATTACHES
TO 25 POUND CONTAINER

List Price
$26.95



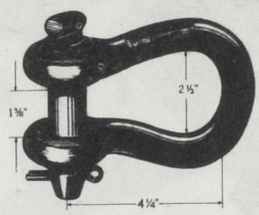
Model 68615
Features

For service and economy the ALEMITE UTILITY PUMP is the leader of the low cost Farm Pumps. Equipped with 5½ ft. High Pressure Hose and hydraulic coupler. Easily develops 2500 lbs.

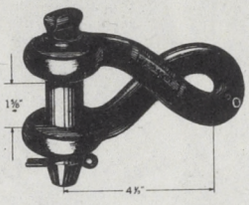
ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

UNIVERSAL TRACTOR CLEVISES

Extra Large Clevises for use with Crawler Tractors



NO. 110

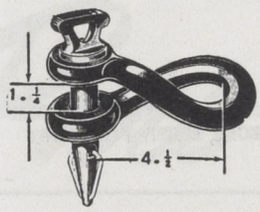


NO. 220

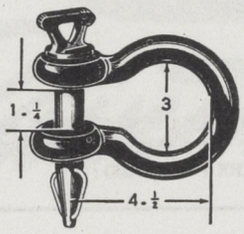
1" Diameter Clevis Body.
1 1/8" Diameter Pin tapered for easy assembly.
Especially for attaching Large Plows and Disc Harrows to Crawler Tractors.

Number	Meas.	Weight	List Ea.
110	1 5/8" x 4 1/2"	5 lbs.	2.50
220	1 5/8" x 4 1/2"	5½ lbs.	2.65

Hi-Strength HEAVY DUTY TRACTOR CLEVISES



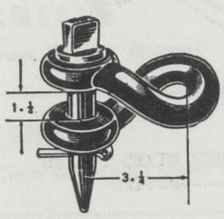
NO. 4278

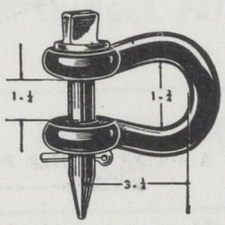


NO. 4178

Hot forged of extra strong steel.
Extra large shackle type heads.
They hold their shape.
Pointed Pin makes hookups faster, easier.
7/8" Steel bodies, 3/4" pins.

Number	Meas.	Weight	List Ea.
4278	1 1/4" x 4 1/2"	3 lb. 8 ozs.	1.40
4178	1 1/4" x 4 1/2"	3 lb. 8 ozs.	1.39

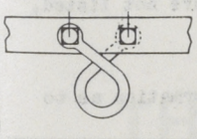




Junior Size.
Pointed pin for easy hookups.
7/8" Steel bodies, 3/4" pins.
Hot forged of extra strong steel.

Number	Meas.	Weight	List Ea.
078	1 1/4" x 3 1/4	3 lb.	1.19
78	1 1/4" x 3 1/4"	3 lb.	1.15

Hi-Strength BOLT-ON TRACTOR



For International Harvestor Tractors.
7/8" Hot forged steel body.
Furnished with two 3/4" x 2 1/2" machine bolts.

No.	Weight	List Ea.
378	4 lb. 12 ozs.	1.55

Hi-Strength INSTANT LOCKING TRACTOR HITCH PINS

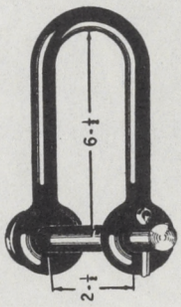


STAINLESS STEEL SPRING WIRE

Instant Locking Spring-----Saves time required to install separate key. Can be removed by operator from Tractor seat by using light rope.
Will not bend under toughest pulls.
STAINLESS Steel locking spring will not rust.

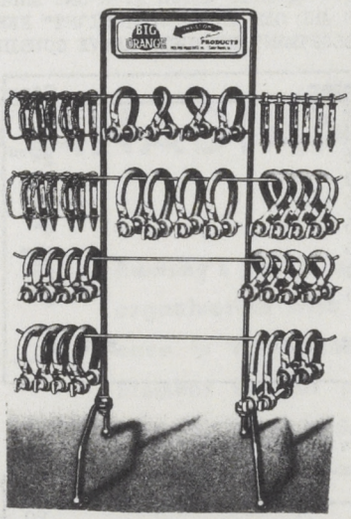
Number	Meas	Weight	List Ea.
34	3/4" Diam.	12 ozs.	.86

Hi-Strength HEAVY DUTY TRACTOR HITCH CLEVISES



Hot forged from extra strong steel.
Loose pin type provides maximum strength.
3/4" Steel body and pin.

Number	Meas.	Wgt.	List Ea.
465	2½" x 6½"	3 lb. 2 ozs.	1.00



DISPLAY STAND AVAILABLE AT NO EXTRA COST WITH EACH ASSORTMENT
★ *Stimulates Buying*
★ *Conserves Selling Time*

Consists of:

12	only	No. 4278	Clevises
12	only	No. 4178	Clevises
6	only	No. 078	Clevises
12	only	No. 78	Clevises
6	only	No. 465	Clevises
12	only	No. 34	Pins
1	only	Display Stand	

Net Price: $50.00

SPOT-A-LITE

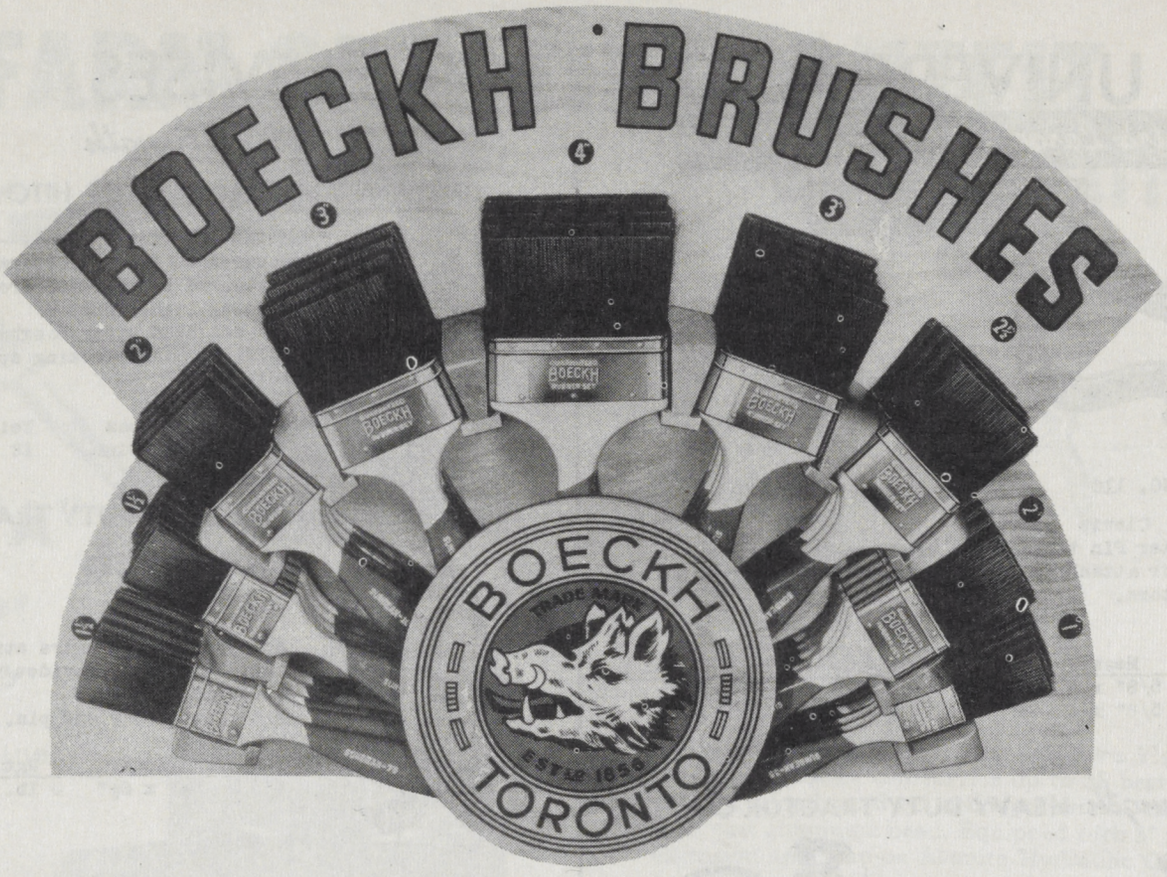
CONVERTER



CONVERTS
ANY TRACTOR LIGHT TO A SPOTLIGHT

For easier, safer farm work in the field and yard.
A turn of the SPOT-A-LITE handle lets the operator "spotlight" any area without moving from his seat.
Permits working up to fence lines.
Vibration of Tractor will not change direction of light beam.
Easily installed. Simply remove lamp, attach SPOT-A-LITE, fasten lamp to convertor.
Eliminates black spots when turning or backing up.

List Price: $3.00



THE NAME BOECKH MEANS QUALITY---QUALITY WHICH EVERYONE UNDERSTANDS---QUALITY QUICKLY APPARENT WHEN YOU PICK UP A BOECKH BRUSH AND STROKE THE BRISTLES AND GET THAT "JUST RIGHT" FEEL BUILT INTO THE HANDLE. THERE IS A BOECKH BRUSH FOR EVERY PAINTING JOB. THE SUNBEAM ASSORTMENT PICTURED ABOVE CONSISTS OF THE FOLLOWING:

Qty.	Number	Size
1 doz.	25	1"
2 doz.	45	1½"
1 doz.	65	2"
1 doz.	100	2½"
½ doz.	125	3"
½ doz.	225	4"
1 doz.	100	1½"
1 doz.	100	2"
½ doz.	225	3"
	Net Price:	$57.06

These brushes are also available as follows:

Number	Size	List Price
25	1"	.20
45	1½"	.36
65	2"	.52
100	2½"	.80
125	3"	1.00
225	4"	1.80
100	1½"	.80
125	2"	1.00
225	3"	1.80

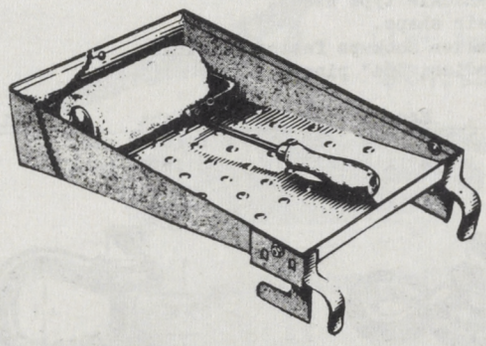
No. 794 WIRE BRUSHES



Steel wire stapled into one piece block and handle. length out 1¼". Not guaranteed for rough work.

Size	No. Rows	Brush Surface	List Price
3	3	5¼"	.70

ROLLER PAINTER and METAL TRAY



A ROLLER PAINTER FOR OIL OR WATER MIXED PAINTS
MODERN--------FASTER--------BETTER

These Rollers are available in both the Regular Type, which is Ideel for interior work, and the New Lambswool Roller for painting rough surfaces, such as rough plaster, cement blocks cinder blocks, metal ceilings, cement floors etc.

METAL CONTAINER

The Ideal Container for use with these Rollers. No wastage or spilling.

	List Price
Metal Tray and Lambswool Roller	3.25
Roller only	1.49
Metal Tray and Ragular Roller	2.25
Roller only	.69

If your particular paint brush requirements are not listed, please contact,

D. ACKLAND & SON LIMITED
WINNIPEG, MAN.

or our nearest BRANCH OFFICE for further information as to types and prices.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.



Pure Paint

THE COMPLETE CANADIAN LINE

"UNICORN" Pure Ready Mixed	**BARN PAINT** Regular Colors
RAMSAY'S Fast Drying Enamel	**SHINGLE PAINT** Regular Colors
"CENTOL" Clear Gloss and Super White	**RAMSAY'S FLOOR FINISH** All Colors
SEMI-GLOSS ENAMEL All Colors	**NU-SEALER** Wall Board Primer Sealer
INTERIOR LUSTRE ENAMEL All Colors	**"IDEAL"** Casein Paint Powders
WAGON TRUCK Implement Paint	**"PINNACLE"** Liquid Process Kalsomine

Ramsay's Paints are made by a world-wide organization with over a 100 years experience in the manufacture of High Grade Finishes for all purposes. This, coupled with the most modern manufacturing facilities, ensures a product of maximum quality and uniformity.

The Ramsay line is complete for all purposes. True color folders are available upon request, together with color-scheme folders to help you with your decorating choices.

Ramsay products are manufactured from the highest grade selected materials and specially treated oils. The name "Ramsay" is your assurance of the highest quality and greatest dollar paint value.

THE RIGHT PAINT, TO PAINT RIGHT

RAMSAY'S PAINTS



RAMSAY'S
PURE READY MIXED PAINT
First Quality

Ramsay's All Canadian Pure Paint gives superior service for every cent of its cost. It looks better and it lasts longer. It is the highest quality paint made and covers approximately 800 square feet per gallon. Its colors are uniform in shade, is easy to apply and dries with a beautiful gloss.

Colors as follows:

26N Cream
32 Light Buff
36 French Grey
39 Cuban Brown
43 Shutter Green
44 Cardinal Red
48 Jade Green
51 Rich Buff
53 Leather Brown
55 Flat White
57 Inside Gloss White
58 Outside Gloss White
59 Gloss Black
60 Flat Black
61 Imperial Green
62 Primrose Yellow
63 Pale Grey
64 Maroon

NON-FADING TRIM COLORS:

91 Bright Red
92 Light Grey
93 Dark Green
94 Blue

LIST PRICE:

	½ Pt.	¼ Gal.	Gal.	5 Gals.
Whites and Regular Colors	**$ .63**	**$2.01**	**$7.27**	**$7.13**
Red and Green	**.67**	**2.17**	**7.93**	**7.80**
Non-Fading Trim Colors	**.76**	**2.48**	**9.27**	**9.13**
Exterior First Coater	**.63**	**2.01**	**7.27**	**7.13**

MOOSE BRAND
READY MIXED PAINT
Second Quality

A hard drying and beautiful glossy product for either exterior or interior use. It is made from selected materials and is a splendid finish for a second quality paint. One gallon will cover approximately 700 square feet.

Colors as follows:

226 Cream
232 Light Buff
235 Ivory
236 French Grey
239 Brown
244 Cardinal Red
248 Jade Green
251 Rich Buff
253 Leather Brown
255 Flat White
257 Inside Gloss White
258 Outside Gloss White
259 Gloss Black
260 Flat Black
261 Imperial Green

LIST PRICE:

½ Pt.	¼ Gal.	Gal.	5 Gals.
$ .57	**$1.77**	**$6.33**	**$6.20**



"DUL-TONE"

A washable, flat finish for all interior decoration. 10 pastel shades. Covers 600 square feet per gallon—one coat.

Colors as follows:

400 White
402 Cream
404 Ivory
405 Mullin Green
406 Buff
410 Grey
414 Primrose
418 Blue
420 Peach
421 Green
422 Pink
Primer Sealer

LIST PRICE:

	¼ Gal.	Gal.	5 Gals.
Regular Colors	**$1.85**	**$6.60**	**$6.45**
Primer Sealer	**1.77**	**6.13**	**6.00**



FLOOR FINISH

For outside and inside use on wood and cement. Wherever a durable, wear-resisting, lustrous waterproof finish is required in homes, factories or public buildings.

Colors as follows:

065 Golden Yellow
068 Orange
071N Light Grey
072 Brown
075 Burnt Orange
076N Buff
077 Light Slate
078 Jade Green
079 Tile Red
084 Medium Grey

LIST PRICE:

	½ Pt.	¼ Gal.	Gal.
All Colors	**$ .64**	**$2.08**	**$7.53**



FAST DRYING ENAMEL

Ramsay's Fast Drying Enamel is so easy and economical to use—and an expert finish so readily obtained—that attractive, new looking rooms can be made by enamelling worn or stored bookcases, chairs or tables in a bright and modern Ramsay Color combination.

Colors as follows:

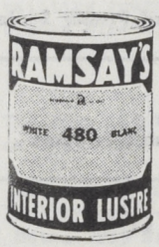
1 Old Ivory
2 Primrose
3 Cream
5 Peach
6 Jonquil Yellow
7 Light Buff
8N Nile Green
9N Pink
10 Royal Blue
11 Silver Grey
13N Azure Blue
14 Bright Green
15 Mahogany
17 Chinese Red
19 Carmine Red
20 Navy Blue
22 Tobacco Brown
23 Orange
24 Walnut
25 Jade
White
Black

Super-Heat-Resisting

Gold
Aluminum

LIST PRICE:

	⅛ Pt.	¼ Pt.	½ Pt.	¼ Gal.	Gal.
Regular Colors		**$ .44**	**$ .71**	**$2.33**	**$8.53**
Sealing Undercoat		**1.55**	**5.50**		
Super Heat Resist. Gold	**$ .32**	**.52**	**.87**	**3.00**	
Super Heat Resist. Alum.	**.27**	**.45**	**.80**	**2.73**	**8.80**



INTERIOR LUSTRE

A truly versatile finish—attractive on walls—serviceable for woodwork and practical for furniture. Brushes on as easily as enamel, covers solidly and dries in a few hours with a dull gloss finish and a hard washable surface.

Colors as follows:

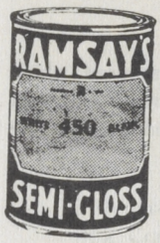
480 White
481 Ivory
482 Cream
485 Green
489 Blue
493 Pink
495 Chartreuse
498 Primrose

LIST PRICE:

	½ Pt.	¼ Gal.	Gal.
All Colors	**$ .65**	**$2.07**	**$7.47**

YOU CAN BE SURE WITH PROVEN PRODUCTS.

RAMSAY'S PAINTS



SEMI-GLOSS

A washable, satin finish for walls and interior use. Stains can be easily removed with a damp cloth or mild soap and water. Washing will neither streak the delicate colors nor glaze the light-diffusing sheen with unattractive glossy spots.

Colors as follows:

450 White
452 Cream
454 Ivory
455 Chartreuse
461 Blue
463 Pink
464 Primrose
465 Green
466 Buff

LIST PRICES:

	½ Pt.	¼ Gal.	1 Gal.	5 Gals. Per Gal.
All Colors	**$1.10**	**$2.00**	**$7.02**	**$6.90**



CENTOL SUPER-WHITE

A fast drying Super-White enamel. The ideal enamel for all kitchen work. Easy to work and covers a large area. Washing does not mar the high finish, and it stays White much longer than ordinary enamels.

	¼ Gal.	1 Gal.	5 Gals. Per Gal.
White	**$ .80**	**$2.66**	**$2.15**



AGATE VARNISH STAIN

Both stains and varnishes in one operation and is particularly adapted for furniture, woodwork and floors. Dries in about 4 hours with a brilliant gloss and may be rubbed or polished as desired.

Colors as follows:

Light Oak
Dark Oak
Mahogany
Walnut
Ground Color

LIST PRICES:

	½ Pt.	¼ Gal.	1 Gal.
Regular Color	**$ .61**	**$2.00**	**$7.21**
Ground Color	**.52**	**1.71**	**6.11**

PERFECTION OIL STAIN

When used on new wood will bring out the beauty of the grain and produce a finish of superior appearance and depth of tone. Easy to apply, penetrates deeply, will not raise the grain of the wood and one coat will usually produce the desired finish. One gallon covers about 550 square feet on soft wood, and about 750 square feet on hard wood.

Colors as follows:

Light Oak
Dark Oak
Walnut
Light Mahogany
Dark Mahogany
Brown Mahogany

LIST PRICES:

	½ Pt.	¼ Gal.	1 Gal.
Regular Colors	**$ .61**	**$1.76**	**$6.10**
Mahogany	**.63**	**2.09**	**7.60**

AGATE FLOOR VARNISH

This varnish is both heel proof and waterproof, and will not scratch or mar. It is transparent and dries in four hours with a beautiful lustrous finish.

LIST PRICES:

½ Pt.	¼ Gal.	1 Gal.	5 Gals. Per Gal.
$ .70	**$2.35**	**$8.64**	**$8.54**

FOUR HOUR GENERAL PURPOSE VARNISH

A medium priced varnish for general use on all classes of interior and exterior woodwork, furniture, floors, etc. Will not turn white. Dries hard in four hours.

LIST PRICES:

½ Pt.	¼ Gal.	1 Gal.	5 Gals. Per Gal.
$ .66	**$2.46**	**$8.12**	**$8.05**

RAMSPAR

A superior varnish which resists alcohol, alkali, gas fumes, oil, ammonia, hot articles and boiling water. Manufactured from selected materials and is unsurpassed for elasticity, durability and covering power. Ram-Spar is clear and colorless, dries dust free in three hours and hard overnight. The best vanish for use on boats, dinghies and canoes.

LIST PRICES:

½ Pt.	¼ Gal.	1 Gal.
$ .72	**$2.38**	**$8.79**

No. 1 FURNITURE

A superior product composed of good quality materials, has good body, flows freely and smoothly under the brush, gives a lasting finish to whatever it is applied.

LIST PRICES:

½ Pt.	¼ Gal.	1 Gal.	5 Gals. Per Gal.
$ .48	**$1.48**	**$4.95**	**$4.90**

UNICORN OIL

A clear hard-drying finish for floors, interior trim and linoleum. Withstands heavy duty in schools, hospitals, churches, etc. Brushes easily, flows out evenly. Dries hard overnight with a bright gloss which withstands constant hard wear. Unicorn Oil is waterproof and neither hot or cold water affects its surface.

LIST PRICES:

½ Pt.	¼ Gal.	1 Gal.	5 Gals. Per Gal.
$ .55	**$1.78**	**$6.25**	**$6.14**



CENTOL CLEAR GLOSS

For outside and inside surfaces, woodwork, linoleum and floors. One quart will cover 250 to 300 square feet. Do not use Shellac or liquid filler under Centol Clear Gloss.

LIST PRICES:

½ Pt.	¼ Gal.	1 Gal.	5 Gals. Per Gal.
$ .73	**$2.41**	**$8.84**	**$8.75**

RAMSAY'S PAINTS

NO. 555 FAST-DRYING

The ideal fast-drying varnish. Allow thorough drying between coats—before permitting use—and from 24 to 48 hours before waxing, polishing or immersion in water.

LIST PRICES:

½ Pt.	¼ Gal.	1 Gal.	5 Gals. Per Gal.
$ .53	$1.74	$6.00	$5.85

BLACK JAPAN



Ramsay's Black Japans are heavy-bodied, very fast drying high gloss finishes for pipes, metal or wood.

LIST PRICES:

½ Pt.	¼ Gal.	1 Gal.	5 Gals. Per Gal.
$ .39	$1.07	$3.51	$3.40

UNION BROWN JAPAN

Mixes readily with paint or oil and has exceptional drying qualities.

½ Pt.	¼ Gal.	1 Gal.	5 Gals. Per Gal.
$ .41	$1.07	$3.51	$3.45

NO. 1 ASPHALTUM

Ramsay's Alphaltums have the ame properties as Black Japans and are also suitable for Walnut stains when thinned with Benzine.

½ Pt.	¼ Gal.	1 Gal.	5 Gals. Per Gal.
$ .39	$1.10	$3.64	$3.55

RAMSAY'S PURE SHELLAC

	½ Pt.	¼ Gal.	1 Gal.
Pure Orange	$ .53	$1.73	$6.45
Pure White	$ .52	$1.65	$6.15

SHINGLE PAINT

Combines the increased covering capacity, glossy appearance and unfading durability of paint with the penetrating and preserving properties of the best stains. Excellent and economical for roofs, cottages, fences, barns, garages and all rough lumber.

Colors as follows:

773 Brigh Green
775 Brown
777 Bright Red
781 Venetian Red
Black
White

LIST PRICES:

	1 Gal.	5 Gals. Per Gal.
Regular Colors	$5.65	$5.52
Bright Red	$7.02	$6.89

SHINGLE STAIN

Through careful experiment colors have been secured which combine with preserving cresote oil in a permanent and rich finish for use on shingles. Two coats are recommended.

Colors as follows:

551 Brown
552 Light Venetian Red
553 Red Cedar
557 Moss Green
558 Sea Green
559 Bottle Green
560 Black

LIST PRICES:

	1 Gal.	5 Gals. Per Gal.
Regular Colors	$3.90	$3.77
Green	$3.62	$3.49

WAGON AND IMPLEMENT PAINT



Wagons, carriages, sleighs, and farm implements can all be reinforced as good as new, and at very little cost. Easy to use, flows smoothly and dries with a glossy washable and durable finish.

Colors as follows:

Yellow Red Blue
Green Black

LIST PRICES:

	¼ Gal.	1 Gal.
All Colors	$1.96	$7.08

BARN AND BRIDGE PAINT

A splendid paint for use on rough lumber and metal, barns, silos, tanks, roofs, bridges, fences, etc. Will wear exceedingly well and provides protection from rot and other forms of decay.

Colors as follows:

1143—Green 1146—Pure Grey 1154—Venetian Red

LIST PRICES:

	1 Gal.	5 Gals. Per Gal.
All Colors	$5.20	$5.23

IDEAL CASEIN FINISH

A casein bound lithopone base paint for all interior surfaces. Cleansable, high coverage and hiding, quick drying, durable.

Colors as follows:

981 Ivory
982 Cream
983 Buff
985 Grey
986 Blue
987 Pink
988 Green
990 Primrose

LIST PRICES:

All Colors and White. Per 5-lb. pkg. $1.23

IDEAL COLD WATER PAINT

For the painting of exterior and semi-exposed surfaces of wood, concrete, brick, stucco, etc. It is especially designed for resistance to exposure.

Colors as follows:

1911 Cream 1915 Grey 1911 Brick Red 1900 White

LIST PRICES:

Packed in 25-lb. Cartons

White. Per lb. ..... $ .16
Colors. Per lb. ..... .18

ALL ORDERS RECEIVE CAREFUL ATTENTION.

RAMSAY'S PAINTS

"PINNACLE" KALSOMINE

A beautiful soft finish for interiors. Inexpensive. Won't rub off. Can be re-coated.

Colors as follow:

801 Ivory	821 Light Blue
802 Cream	822 Light Green
803 Buff	823 Tan
810 Terra Cotta	824 Pink
818 Blue	826 Dark Buff
819 Green	827 Gray

LIST PRICES:

All Colors and White. Per lb. ..... **$ .20**

COLORS IN OIL (Unicorn)

DESCRIPTION	LIST PRICE (Per lb.)
Drop Black	**$ .85**
Refined Lamp Black	**.85**
Prussian Blue	**1.31**
Ultramarine Blue	**1.05**
Cobalt Blue	**1.31**
Italian Sienna, Raw	**.72**
Italian Sienna, Burnt	**.72**
Turkey Umber, Raw	**.72**
Turkey Umber, Burnt	**.72**
Imperial Green, Light	**.79**
Imperial Green, Medium	**.79**
Imperial Green, Dark	**.79**
French Permanent Green	**.72**
Bottle Green	**.72**
American Vermillion, Light	**1.31**
American Vermillion, Dark	**1.31**
Rose Pink	**1.31**
Indian Red	**.72**
Venetian Red	**.59**
Permanent Red	**1.37**
Chrome Yellow, Medium	**1.05**
Chrome Yellow, Dark	**1.05**
Yellow Ochre	**.59**
Golden Ochre	**.73**
Van Dyke Brown	**.61**
Super Red Oside in 5-lb. tins only	**.40**

VARNOFF

Will remove the thickest coats of Paint or Varnish in a few minutes. Simply apply with brush, allow to stand for five or ten minutes, then scrape off with knife.

LIST PRICES:

½ Pt.	¼ Gal.	1 Gal.
$ .40	**$1.40**	**$4.00**

FLOOR WAX

This floor wax is unexcelled for polishing floors, furniture, leather goods, autos, etc. Very easy to apply and a high polish is obtained with a minimum of effort.

LIST PRICES:

1 lb. Tin ..... **$ .45**

LIQUID WOOD FILLER

For use on any light colored, close grained wood. Pale in color, dries hard and will not crack or peel. After applying allow to dry, then rub lightly with sand paper.

LIST PRICES:

½ Pt.	¼ Gal.	1 Gal.
$ .45	**$1.40**	**$4.80**

PASTE WOOD FILLER

1 lb. Tin ..... **$ .40**
5 lb. Tin **1.75**

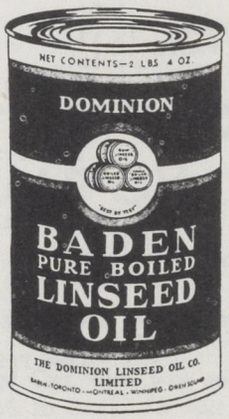
GOVERNMENT STANDARD PURE WHITE LEAD

Guaranteed absolutely pure, made of the highest grade materials. A product that will be found to meet the requirements of those wanting the very finest grade of white lead.

LIST PRICE:

Per 25-lb. Iron **$7.80**

RAW LINSEED OIL



Is mostly used for light colored and white paints and is best for exterior work.

LIST PRICES:

⅛ Gal.	¼ Gal.	1 Gal.	5 Gal.
$ .48	**$ .88**	**$3.07**	**$13.93**

BOILED LINSEED OIL

Cannot be used in White paint without discoloring it. Also used on wood as a surface coater.

LIST PRICES:

⅛ Gal.	¼ Gal.	1 Gal.	5 Gal.
$ .48	**$ .89**	**$3.13**	**$14.17**

TURPENTINE

LIST PRICES:

⅛ Gal.	¼ Gal.	1 Gal.	5 Gal.
$ .35	**$ .61**	**$1.97**	**$8.75**

PAINTER'S SUPPLIES

SAND PAPER



Size of sheets, 9 x 11 inches, 24 sheets to a quire.

Nos.	00	0	½	1
Per Quire	.35	.35	.37	.41
Nos.	1½	2	2½	3
Per Quire	.47	.53	.60	.70

ASSORTMENT

A packet of 20 sheets of the most usable grits. Size of sheets 4 3/8" x 5 1/4"
List Price: .11

EMERY CLOTH

Best grade, linen coated, with finest emery. 24 sheets to a quire.

Nos.	0	½	1	1½
Per Quire	2.00	2.08	2.19	2.29
Nos.	2	2½	3	
Per Quire	2.44	2.63	2.84	

DIC-A-DOO PAINT CLEANER

Mix with cold water to consistency of thin cream, apply with brush then wipe off with sponge or wet cloth. The dirt is lifted off leaving surface spotlessly clean.
List Price: 1 Lb. Pkg. .27

ADHESO DRY PASTE

The fine particles of this powder make it easier and quicker to mix ensuring a smoother finer finish.

	List Price
1 lb. Carton	.31
2 lb. Carton	.60
5 lb. Carton	1.41

REX COLD WATER SIZE

Makes a flexible and lasting surface which will not peel or crack.

	List Price
1 lb. package	.40

SMOOTHWALL DRY

Spatchling Compound--The perfect crack filler. Ideal for use on cracks in plaster walls and ceilings. Makes a permanent mending job. Will take paint, and cold water mixtures without showing join.

1 Lb. Package List Price .20
5 Lb. Package List Price .85

LIQUID GLUE

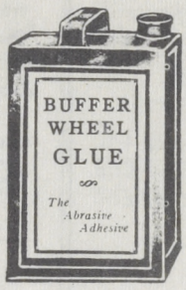


1/2 Pt.	Pt.	QT.	Gal.
.54	.71	1.60	4.10

SHEET GLUE

40-55 Ground N.F. Brown. For general work and used for sizing.
List per lb. .44

BUFFER WHEEL GLUE



Used extensively as a substitute for glue in holding emery and other abrasives on polishing wheels for plow work.

	Quarts	½ Gals.	Gals.
List Price:	.73	1.40	2.33

BULLDOG GRIP LIQUID GLUE



The Ideal "All Purpose" Glue. Use it on wood, metal, rubber, glass, plastics, paper and leather, see what a wonderful repair job it can do. Easy to use.

Nos.	32	16	8	4	1
Contents Ozs.	4	8	16	32	128
List Price	.39	.67	1.07	1.94	5.35

CELLULOSE SPONGES



SUPERIOR TO NATURAL SPONGES IN EVERY WAY.

Velvety soft when wet. Soft texture won't hurt the finest finish. Flat surfaces cover more area, saving time and effort. These remarkable sponges float...do not pick dirt from bottom of cleaning pail. Free from grit, sand and organic impurities. Pick up and hold 20 times their weight in water...amazingly absorbent. Square shape permits sponge to get into corners. C-I-L Sponges are tough and durable...outlast natural sponges... can be easily sterilized by boiling. When squeezed dry, may be used as a chamois.

Size	Dimensions	List Price
4	4 1/2 x 3 x 1	.25
6	5 1/8 x 3 2/3 x 1 1/3	.45
8	6 x 4 x 2 ·	.85
9	7 1/2 x 4 3/4 x 2 1/4	1.15
10	7 1/4 x 4 1/2 x 2 1/4	1.25

WORKSHOP CEMENT



REQUIRES NO MIXING OR HEATING

A transparent, heavy-bodied, easy-working cement with good wet strength for general workshop use in the home. Ideal for glass, metal, wood, plastics, leather tile, wallboard and concrete. Strong and water resistant.

		List Price
¼	Pint	.85
½	Pint	1.35
1	Pint	2.40

WORKSHOP CEMENT SOLVENT

A solvent to be used when Workshop Cement becomes too heavy for easy application. Will restore the cement to it's original working consistency.
¼ Pint List Price .45



HANDLES LIKE PUTTY - HARDENS INTO WOOD

Unequalled for filling cracks, scratches, nail holes, etc., in wood and for repairing wooden articles. When dry it can be nailed, screwed, sawed, carved, planed and will sand to a fine edge. Is grease-proof and waterproof and takes paint, lacquer, stain and varnish perfectly. Packed in four handy sizes.

			List Price
1½	Oz.	Tube	.25
4	Oz.	Can	.45
1	Lb.	Can	1.15
10	Lb.	Can	8.65

PLASTIC WOOD SOLVENT

For use when Plastic Wood has dried in the can through prolonged exposure to air. A little Plastic Wood Solvent poured in the can and allowed to stand before using will restore the Plastic Wood to proper working consistency. Packed in four handy sizes.

		List Price
1/4	Pint	.45
1	Pint	.95
1	Quart	1.40
1	Gallon	4.60

HOBBY CEMENT



Made especially for the Hobbyist and for those who like to make and mend things. Ideal for making, Model Planes, Jewellery, Trains, Boats, Leather Work, Artificial Flowers, Ceramics and Moulded or Cut Glass Ware. Comes in convenient 1 Oz. Tubes.

List Price: .15

HOUSEHOLD CEMENT



TRANSPARENT-WATERPROOF-DRIES QUICKLY

C-I-L Household Cement is a transparent, flexible waterproof cement for mending broken china, glass, wood and metal articles and for repairing tears in leather, paper and fabrics. Easy to apply and dries quickly.
1¾ Oz. Tubes List Price: .25

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

STEEL BAR SECTION

TO OUR MANY CUSTOMERS

For nearly half a century we have been supplying the trade with steel bars. Our experience, coupled with our large stock carried at several advantage points, gives us every opportunity to serve you in the best possible manner.

If you require sizes which you are unable to find listed, please send your inquiries to head office in Winnipeg or to our nearest branch.

Prices on steel bars are subject to change without notice. Therefore price sheets will be issued as frequently as possible to keep you posted on current prices.

To help you in pricing your iron stocks we give you an example of how the price of bar iron is arrived at.

How to Arrive at Your Price of Iron:

Base Price	$6.00
Plus extras for size	.50
Plus extras for quantity	.25
	$6.75
Add your freight	?
	TOTAL

Quantity Extras:

499 lbs. or less	cwt.	.25
500 to 1999	cwt.	.20
2000 to 6000	cwt.	.15



ROUNDS



16 FT. BARS

10-20 Carbon

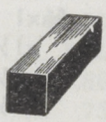
Sizes and Weights Per Lineal Foot

Base Price $6.50 Per Cwt. Plus Size and Quantity Extras

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
3/16	0.09	on Application
¼	0.17	on Application
5/16	0.26	on Application
⅜	.38	.80
7/16	.51	.65
½	.67	.50
9/16	.84	.35
⅝	1.04	.25
¾	1.5	.15
⅞	2.04	.15
1	2.67	.10
1⅛	3.38	.10
1¼	4.17	.10
1⅜	5.049	.10
1½	6.	BASE
1⅝	7.05	BASE
1¾	8.18	BASE
2	10.68	.15
2⅛	12.06	.15
2¼	13.52	.15
2½	16.69	.15
3	24.03	.30



SQUARES



16 FT. BARS

10-20 Carbon

Sizes and Weights Per Lineal Foot

Base Price $6.50 Per Cwt. Plus Size and Quantity Extras

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
⅜	.48	.80
7/16	.65	.65
½	.85	.50
9/16	1.08	.35
⅝	1.33	.25
¾	1.91	.15
⅞	2.60	.15

SQUARES (Continued)

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
1	3.4	.10
1⅛	4.3	.10
1¼	5.31	.10
1⅜	6.43	.10
1½	7.65	BASE
1¾	10.41	BASE
2	13.6	.15
2¼	17.21	.15
2½	21.25	.15
3	30.6	.30



HALF OVALS



16 FT. BARS

10-20 Carbon

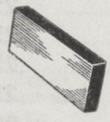
Sizes and Weights Per Lineal Foot

⅝ to 1¼

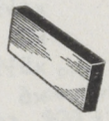
Base Price $8.50 Per Cwt. Plus Size and Quantity Extras

1½ to 2—$7.75 Net

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
⅝x3/16	.28	1.45
¾x¼	.46	1.20
⅞x¼	.53	1.20
1 x5/16	.76	.90
1⅛x5/16	.84	.90
1¼x⅜	1.14	.90
1½x⅜	2.	Net 7.75
1¾x7/16	2.3	Net 7.75
2 x½	2.6	Net 7.75



FLATS



20 FT. BARS

10-20 Carbon

Sizes and Weights Per Lineal Foot

Base Price $6.50 Per Cwt. Plus Size and Quantity Extras

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
⅛x ¾	.32	1.35
x ⅞	.37	1.30
x1	.43	1.20

STEEL BAR SECTION

FLATS—Continued

10-20 Carbon

20 FT. BARS

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
⅛x1⅛	.48	1.20
x1¼	.53	1.20
x1½	.64	1.15
x1¾	.74	1.15
x2	.85	1.15
x2¼	.96	.85
x2½	1.06	.85
x3	1.28	.85
x3½	1.49	.75
x4	1.7	.75
x4½	1.91	.65
x5	2.13	.65
x5½	2.34	.65
x6	2.55	.65

16 FT. BARS

3/16x ⅝	.40	1.30
x ¾	.48	1.30
x ⅞	.56	1.25
x1	.64	1.20
x1⅛	.72	1.20
x1¼	.80	1.15
x1½	.96	1.15
x1¾	1.11	1.15
x2	1.28	1.15
x2¼	1.43	.85
x2½	1.59	.85
x3	1.91	.85
x3½	2.23	.75
x4	2.55	.75
x4½	2.87	.65
x5	3.19	.65
x5½	3.51	.65
x6	3.83	.65
¼x ⅝	.53	.90
x ¾	.64	.75
x ⅞	.74	.75
x1	.85	.60
x1⅛	.96	.60
x1¼	1.06	.60
x1½	1.28	.50
x1¾	1.49	.50
x2	1.7	.50
x2¼	1.91	.35
x2½	2.13	.35
x3	2.55	.35
x3½	2.98	.35
x4	3.4	.35
x4½	3.83	.25
x5	4.25	.25
x5½	4.68	.25
x6	5.1	.25
5/16x ⅝	.66	.90
x ¾	.80	.75
x ⅞	.93	.75
x1	1.06	.60
x1⅛	1.2	.60
x1¼	1.33	.60
x1½	1.59	.50
x1¾	1.86	.50
x2	2.13	.50
x2¼	2.39	.35

16 FT. BARS—Continued

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
5/16x2½	2.66	.35
x3	3.19	.35
x3¼	3.45	.35
x3½	3.72	.35
x4	4.25	.35
x4½	4.78	.25
x5	5.31	.25
x5½	5.84	.25
x6	6.38	.25
⅜x ⅝	.80	.75
x ¾	.96	.60
x ⅞	1.11	.60
x1	1.28	.50
x1⅛	1.43	.50
x1¼	1.59	.50
x1½	1.91	.40
x1¾	2.23	.40
x2	2.55	.40
x2¼	2.87	.35
x2½	3.19	.35
x3	3.83	.35
x3¼	4.14	.35
x3½	4.46	.35
x4	5.1	.35
x4½	5.74	.25
x5	6.38	.25
x5½	7.01	.25
x6	7.65	.25
½x ¾	1.28	.60
x ⅞	1.49	.60
x1	1.7	.50
x1⅛	1.91	.50
x1¼	2.13	.50
x1½	2.55	.35
x1¾	2.98	.35
x2	3.4	.35
x2¼	3.83	.30
x2½	4.25	.30
x3	5.1	.25
x3½	5.95	.25
x4	6.8	.25
x4½	7.65	.20
x5	8.5	.20
x5½	9.35	.15
x6	10.2	.15
x8	13.60	.20
⅝x1	2.13	.50
x1⅛	2.39	.50
x1¼	2.66	.50
x1½	3.19	.35
x1¾	3.72	.35
x2	4.25	.35
x2½	5.31	.30
x3	6.38	.25
x3½	7.44	.25
x4	8.5	.25
x4½	9.56	.20
x5	10.63	.20
x5½	11.69	.15
x6	12.75	.15
x8	17.00	.20
¾x1	2.55	.50
x1¼	3.19	.50

STEEL BAR SECTION

FLATS—Continued

10-20 Carbon

16 FT. BARS—Continued

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
¾x1½	3.83	.35
x1¾	4.46	.35
x2	5.1	.35
x2½	6.38	.30
x3	7.65	.25
x3½	8.93	.25
x4	10.2	.25
x4½	11.48	.20
x5	12.75	.20
x5½	14.03	.15
x6	15.3	.15
⅞x1¼	3.72	.45
x1½	4.46	.35
x1¾	5.21	.35
x2	5.95	.35
x2½	7.44	.30
x3	8.93	.25
x3½	10.41	.25
x4	11.9	.25
x4½	13.39	.20
x5	14.88	.20
x5½	16.36	.15
x6	17.85	.15
1x1¼	4.25	.45
x1½	5.1	.35
x1¾	5.95	.35
x2	6.8	.35
x2½	8.5	.30
x3	10.2	.25
x3½	11.9	.25
x4	13.6	.25
x4½	15.3	.20
x5	17.	.20
x5½	18.7	.15
x6	20.4	.15
x8	27.20	.30

ANGLES





20 FT. BARS

Sizes and Weights Per Lineal Foot

Base Price $7.50 Per Cwt. Plus Size and Quantity Extra

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
¾x ¾x⅛	.59	$1.20
x3/16	.84	1.20
1 x1 x⅛	.80	.80
x3/16	1.16	.75
x¼	1.49	.75
1¼x1¼x⅛	1.01	.80
x3/16	1.48	.75
x¼	1.92	.75
1½x1½x⅛	1.23	.65
x3/16	1.80	.50
x¼	2.34	.50
x5/16	2.86	.50
1¾x1¾x⅛	1.44	.65
x3/16	2.12	.50
x¼	2.77	.50

ANGLES—Continued

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
1¾x1¾x5/16	3.39	.50
2 x1½x⅛	1.44	.65
x3/16	2.12	.55
x¼	2.77	.55
2 x2 x⅛	1.65	.65
x3/16	2.44	.50
x¼	3.19	.50
x5/16	3.92	.50
x⅜	4.7	.50
2½x1½x3/16	2.44	.55
x¼	3.19	.55
x5/16	3.92	.55
2½x2 x3/16	2.75	.50
x¼	3.62	.50
x5/16	4.5	.50
x⅜	5.3	.50
2½x2½x3/16	3.07	.50
x¼	4.1	.50
x5/16	5.0	.50
x⅜	5.9	.50
3 x2 x3/16	3.07	.40
x¼	4.10	BASE
x5/16	5.00	"
x⅜	5.90	"
3 x2½x¼	4.5	"
x5/16	5.6	"
x⅜	6.6	"
x½	8.5	"
3 x3 x3/16	3.71	.25
x¼	4.9	BASE
x5/16	6.1	"
x⅜	7.2	"
x½	9.4	"
3½x3 x¼	5.4	.20
x5/16	6.6	.20
x⅜	7.9	.20
x½	10.2	.20
4 x3 x¼	5.8	.45
x5/16	7.2	.20
x⅜	8.5	.20
x½	11.1	.20
4 x4 x¼	6.6	.35
x5/16	8.2	.20
x⅜	9.8	.20
x½	12.8	.20
x⅝	15.7	.20
6 x6 x ½	19.6	.25
6 x6 x ⅝	24.3	.25
6 x6 x ¾	28.7	.25

HOOP STEEL

Coil of Approximately 50 lbs.

Size in Inches	Gauge	Weight per Foot	Price per Cwt.
½	16	.106	$27.17
¾	19	.107	21.53
1	19	.142	19.90
1¼	19	.178	19.80
1½	19	.214	19.80
1½	16	.331	19.40
1¾	16	.386	19.40
2	16	.442	19.40
2½	16	.552	18.70

STEEL BAR SECTION

SLEIGH SHOE STEEL

40-50 Carbon

18 FT. BARS

Sizes and Weights Per Lineal Foot

Base Price $6.60 Cwt. Plus Size and Quantity Extras

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
¼x1	.85	.60
x1¼	1.06	.60
x1½	1.28	.50
x1¾	1.49	.50
x2	1.7	.50
x2¼	1.91	.35
x2½	2.13	.35
x3	2.55	.35
5/16x1	1.07	.60
x1¼	1.33	.60
x1½	1.59	.50
x1¾	1.86	.50
x2	2.13	.50
x2¼	2.39	.35
x2½	2.66	.35
x3	3.19	.35
⅜x1¼	1.59	.50
x1½	1.91	.40
x1¾	2.23	.40
x2	2.55	.40
x2¼	2.87	.35
x2½	3.19	.35
x3	3.83	.35
x4	5.1	.35
½x1¼	2.13	.50
x1½	2.55	.35
x1¾	2.98	.35
x2	3.4	.35
x2½	4.25	.30
x3	5.1	.25
x3½	5.95	.25
x4	6.8	.25
⅝x4	8.5	.25

SLEIGH SHOE STEEL

(in special lengths)

Size in Inches		Net Extra for Size
5/16x2	x5'8	.88
x2	x6'	.94
x2¼	x5'8	.98
x2½	x5'8	1.10
x2½	x6'	1.16
⅜x2	x5'8	1.06
x2	x6'	1.13
x2¼	x5'8	1.20
x2½	x5'8	1.30
x2½	x6'	1.38
x2½	x8'	1.81
x3	x8'	2.28
½x4	x9'	4.47

CONVEX SLEIGH SHOE

9 FT. BARS

Sizes and Weights Per Lineal Foot

Size in Inches	Weight per Foot, Lbs.	Net Price per 100 Lbs.
¾x4	7.7	5.70
1 x4	10.7	7.75

CONCAVE SLEIGH SHOE

9 FT. BARS

Sizes and Weights Per Lineal Foot

Size in Inches	Weight per Foot, Lbs.	Net Price per 100 Lbs.
½x4	6.8	5.65
⅝x4	8.5	7.00

COULTER STEEL

10 & 12 FT. BARS

Sizes and Weights Per Lineal Foot

Base Price $7.15 Cwt. Plus Size and Quantity Extras

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
⅝x2½	5.31	.30
x3	6.37	.25
x4	8.50	.25
x6	12.75	.15
x7	14.87	.30
x8	17.	.30
¾x2	5.10	.35
x3	7.65	.25
x4	10.20	.25
x5	12.75	.20
x6	15.30	.15
x7	17.85	.30
⅞x4	11.90	.25
x5	14.8	.20
x6	17.85	.15
1 x4	13.60	.25
x5	17.	.15
x6	20.40	.15
x8	27.20	.30
1⅛x8	30.60	.30

PLOW SHARE

12 FT. BARS

Sizes and Weights Per Lineal Foot

Base Price $7.15 Cwt. Plus Size and Quantity Extras

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
¼x 6	3.83	.65
x 7	5.10	.25
x 8	6.80	.30
5/16x 6	6.38	.25
x 7	7.44	.30
x 8	8.50	.30
⅜x 6	7.65	.25
x 8	10.20	.30
x10	12.75	on Application
x12	15.30	on Application
½x 6	10.20	.15
x 8	13.60	.30
x10	17.	on Application
x12	20.40	on Application
⅝x10	21.25	on Application
x12	25.50	on Application
¾x10	25.50	on Application
x12	30.60	on Application
1 x10	34.	on Application

TOE CALK

8 FT. BARS

Size in Inches	Weight per Foot, Lbs.
3/16x7/16	0.30
x½	0.32
x⅝	0.40
¼x⅜	0.32
x7/16	0.38
x½	0.43
x⅝	0.53

EVERY ORDER IS A RUSH ORDER WITH US

STEEL BAR SECTION

PLOW POINT STEEL

18 FT. BARS

Sizes and Weights Per Lineal Foot
A High Carbon Steel Adapted for Plow Points
Base Price $7.15 Plus Extras for Size and Quantity

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
5/16x2	2.12	.50
x2 1/4	2.39	.35
x2 1/2	2.65	.35
3/8x2	2.55	.40
x2 1/4	2.86	.35
x2 1/2	3.18	.35

SQUARE HARROW TOOTH

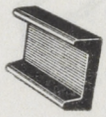
16 FT. BARS

Sizes and Weights Per Lineal Foot
Base Price $7.15 Plus Extras for Size and Quantity

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
1/2	8.50	.50
5/8	1.32	.25
3/4	1.91	.15
7/8	2.60	.15
1	3.40	.15
1 1/8	4.30	.10
1 1/4	5.31	.10
1 3/8	6.42	.10
1 1/2	7.65	BASE
1 3/4	10.40	BASE
2	13.60	.15

CHANNELS





20 FT. BARS

Sizes and Weights Per Lineal Foot
Base Price $7.65 Plus Extras for Size and Quantity

Size in Inches	Weight per Foot, Lbs.	Net Extra for Size
1 x3/8x1/8	.68	1.00
1 1/4x1/2x1/8	1.01	1.00
1 1/2x1/2x1/8	1.12	1.00

STRUCTURAL SIZES

Base Price $7.80 Net

Depth Inches	Weight per Foot, Lbs.	Thickness of Web	Width of Flange, Inches	Net Extra for Size
*3	4.1	0.17	1.41	.80
	5.0	0.26	1.50	.80
	6.0	0.36	1.60	.80
*4	5.4	0.18	1.58	.60
	6.25	0.25	1.65	.60
	7.25	0.32	1.72	.60
*5	6.7	0.19	1.75	.45
	9.0	0.33	1.89	.45
*6	8.2	0.20	1.92	.40
	10.5	0.31	2.03	.40
	13.0	0.44	2.16	.40

*Stocked.

COLD ROLLED SHAFTING

20 FT. BARS

Sizes and Weights Per Lineal Foot

Size in Inches	Round Weight Lbs. per Foot	Price per 100 Lbs.	Square Weight Lbs. per Foot	Price per 100 Lbs.
1/8	.04		.053	
3/16	.09	20.35	.120	33.60
1/4	.17	18.25	.213	23.30
5/16	.26	16.05	.332	21.45
3/8	.38	14.90	.478	19.60
7/16	.51	14.80	.651	19.25
1/2	.67	14.65	.850	19.10
9/16	.85	14.30	1.08	19.10
5/8	1.04	13.75	1.33	18.55
11/16	1.26	13.40	1.61	18.55
3/4	1.50	13.40	1.91	18.55
13/16	1.76	13.40	2.24	18.55
7/8	2.05	13.40	2.60	18.55
15/16	2.35	13.20	2.99	18.55
1	2.67	13.20	3.40	18.55
1 1/16	3.01	13.20	3.83	18.55
1 1/8	3.38	13.20	4.30	18.55
1 3/16	3.77	13.20		
1 1/4	4.17	13.20	5.31	18.55
1 5/16	4.60	13.20		
1 3/8	5.05	13.20	6.43	18.55
1 7/16	5.52	13.00		
1 1/2	6.01	13.00	7.65	18.65
1 9/16	6.52	13.00		
1 5/8	7.05	13.00	8.98	18.65
1 11/16	7.60	13.00		
1 3/4	8.18	13.00	10.41	18.65
1 13/16	8.77	13.00		
1 7/8	9.39	13.00		
1 15/16	10.02	13.20		
2	10.68	13.20	13.60	18.65
2 1/16	11.36	13.20		
2 1/8	12.06	13.20		
2 3/16	12.78	13.20		
2 1/4	13.52	13.20	17.12	18.65
2 5/16	14.28	13.20		
2 3/8	15.06	13.20		
2 7/16	15.87	13.20		
2 1/2	16.69	13.35		
2 9/16	17.53	13.35		
2 5/8	18.40	13.35		
2 11/16	19.29	13.35		
2 3/4	20.20	13.35		
2 13/16	21.12	13.35		
2 7/8	22.07	13.35		
2 15/16	23.04	13.35		
3	24.03	13.35		

Cold Rolled Shafting Assortments

2 FT. LENGTHS

Assortment consists of

2 Pieces 3/16 in., 2 Pieces 5/16 in., 1 Piece 7/16 in.
2 Pieces 1/4 in., 2 Pieces 3/8 in., 1 Piece 1/2 in.

Approximate Weight 6 lbs. Per Assortment $1.87

Square Key Steel Assortments

2 FT. LENGTHS

Assortment consists of

2 Pieces 3/16 in., 2 Pieces 5/16 in., 1 Piece 7/16 in.
2 Pieces 1/4 in., 2 Pieces 3/8 in., 1 Piece 1/2 in.

Approximate Weight 7 lbs. Per Assortment $2.05

STEEL BAR SECTION

BAND STEEL

20 FT. BARS

Sizes and Weights Per Lineal Foot

Base Price $6.50 Plus Extras for Size and Quantity

Size Inches	Weight	Extra Over Bar Base
⅛ x ½	.22	
x ⅝	.27	
x ¾	.319	1.35
x ⅞	.372	1.30
x1	.425	1.20
x1⅛	.48	1.20
x1¼	.54	1.20
x1½	.64	1.15
x1¾	.75	1.15
x2	.85	1.15
x2¼	.96	.85
x2½	1.07	.85
x3	1.28	.85
x3½	1.49	.75
x4	1.70	.75
x4½	1.92	.65
x5	2.13	.65
x6	2.55	.65

EVERY ORDER IS A RUSH ORDER WITH US

STANDARD STEEL PIPE

Black and Galv'd

APPROX. 20 FT. LENGTHS

Size in Inches Buttweld	Price per 100 Feet Black	Galvanized	Weight per 100 Feet in Pounds
⅛	9.45	12.95	24
¼	8.80	11.50	42
⅜	9.30	11.90	57
½	12.05	14.75	85
¾	15.65	19.10	113
1	22.20	27.10	168
1¼	29.75	36.30	228
1½	35.60	43.50	273
2	47.40	58.00	368
2½	75.00	92.00	582
3	98.00	120.00	762
3½	125.00	152.00	920
4	147.00	180.00	1089

Lapweld			
5	Prices on Application		1481
6			1919
8			2500
10			3200
12			4500

GALVANIZED PUMP RODS

20 FT. BARS

Size in Inches	Price per 100 Feet	Weight per Foot
⅜	14.50	.377
7/16	14.20	.511
½	14.00	.667



TOOL STEEL

EDGAR ALLEN



10 FT. BARS

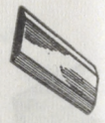
Size in Inches	Weight per Foot Octagon Cap	Weight per Foot Square
⅜	.41	.52
½	.72	.92
⅝	1.12	1.33
¾	1.62	1.91
⅞	2.20	2.60
1	2.87	3.40
1⅛	3.64	4.30
1¼	4.50	5.31

Stag Brand and also L.S.D.

The Ideal Tool Steel to make Dies, Chisels, Punches, etc.



BEVELLED WAGON BOX EDGING



¾" x 12 Ga.

Weight per foot—.3125

$8.75 Net Per 100 lbs.

BLACK IRON SHEETS

Hot Rolled

Size	Est. Weight per Sheet	Net Price per 100 Lbs.
	10 GAUGE	
36x96	135.0	7.45
36x120	168.8	7.45
48x96	180.0	7.45
48x120	225.0	7.45
48x144	270.0	7.45
60x96	225.0	8.10
60x120	281.3	8.10
60x144	337.5	8.10
72x96	270.0	8.15
72x120	337.5	8.15
72x144	405.0	8.15

STEEL BAR SECTION

BLACK IRON SHEETS—Continued

Size	Est. Weight per Sheet	Net Price per 100 Lbs.
12 GAUGE		
36x 96	105.0	7.45
36x120	131.3	7.45
48x 96	140.0	7.45
48x120	175.0	7.45
48x144	210.0	7.45
60x120	218.8	8.10
60x144	262.5	8.10
72x144	315.0	8.15
14 GAUGE		
36x 96	75.0	7.65
36x120	93.8	7.65
48x 96	100.0	7.65
48x120	125.0	7.65
48x144	150.0	7.65
60x 96	125.0	9.15
60x120	156.3	9.15
60x144	187.5	9.50
72x120	187.5	9.50
72x144	225.0	9.50
16 GAUGE		
36x 96	60.0	7.70
36x120	75.0	7.70
48x 96	80.0	7.70
48x120	100.0	7.70
48x144	120.0	7.70
60x 96	100.0	9.10
60x120	125.0	9.10
60x144	150.0	9.10
72x120	150.0	9.10
72x144	180.0	9.10
18 GAUGE		
36x 72	36	8.00
36x 96	48	8.00
36x120	60	8.00

Size	Est. Weight per Sheet	Net Price per 100 Lbs.
20 GAUGE		
36x 96	22 lbs.	Prices on Application
36x 72	28½ lbs.	
36x 96	38 lbs.	
36x120	45 lbs.	
22 GAUGE		
30x96	25 lbs.	
30x12	31½ lbs.	
36x72	22½ lbs.	
24 GAUGE		
30x 96	30 lbs.	
30x120	25 lbs.	
30x 72	18 lbs.	
36x 96	24 lbs.	
36x120	30 lbs.	
28 GAUGE		
30x 96	12 lbs.	
30x120	16 lbs.	
36x 72	11½ lbs.	
36x 96	15 lbs.	

GALVANIZED SHEETS

Size	Est. Weight per Sheet	
20 GAUGE		
30x 96	33½	lbs.
36x 72	30	lbs.
36x 96	40	lbs.
36x120	50	lbs.
22 GAUGE		
30x 96	28½	lbs.
30x120	35½	lbs.
36x 72	25½	lbs.
36x 96	34	lbs.
36x120	42½	lbs.
24 GAUGE		
24x 39	23½	lbs.
32x120	29	lbs.
36x 72	21	lbs.
36x 96	28	lbs.
36x120	35	lbs.
26 GAUGE		
30x 96	18½	lbs.
30x120	23	lbs.
36x 72	16½	lbs.
36x 96	22	lbs.
36x120	27½	lbs.
28 GAUGE		
30x 96	16	lbs.
30x120	20	lbs.
36x 72	14½	lbs.
36x 96	19	lbs.
36x120	23½	lbs.
30 GAUGE		
30x 96	13½	lbs.
30x120	16½	lbs.
36x 72	12	lbs.
36x 96	16	lbs.
36x120	20	lbs.

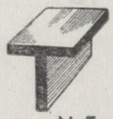
Prices on Application



TEES

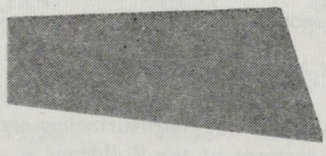
20 FT. BARS

Base Price $7.50 Net



Flange Inches	Size of Stem, Inch	Web Tk's	Wgt. per Foot, Lbs.	N. Ex. for Size
1¼	1¼	3/16	1.55	.65
1½	1½	3/16	1.88	.50
2	2	¼	3.38	.50
3	3	¼	5.50	.10

MAW COULTER POINTS



1" thick. Each 2.25

If there are any items that are not listed in the preceding pages, that you may require, please contact

D. ACKLAND & SON LTD.

BULLDOG GRIP-LUGS

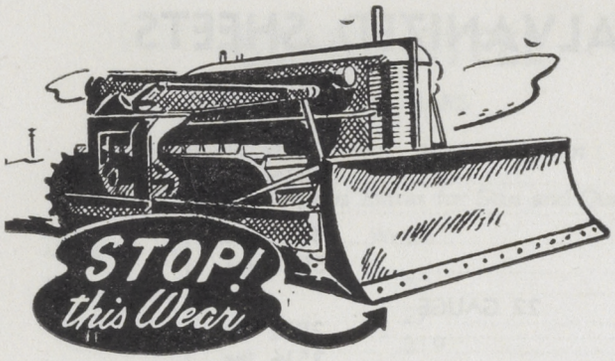


Illustration shows BULLDOG GRIP-LUG partially welded to worn grouser

REBUILD YOUR TRACTOR GROUSERS WITH BULLDOG GRIP-LUGS

QUANTITY TABLE
Allis-Chalmers

Models	No. of Grousers	8"	12"	13"	14"	15"	16"	18"	20"	22"	24"
HD-7	68	....	....	....	....	....	....	102'	114'	125'	136'
HD-10	64	....	....	....	....	....	....	96'	107'	118'	128'
HD-14	70	....	....	....	....	....	....	105'	117'	129'	140'
K KO	68	....	....	....	....	....	....	102'	114'	125'	136'
L LO	70	....	....	....	....	....	....	105'	117'	129'	140'
M	62	....	62'	....	73'	....	83'	.....	.....	.....	.....
S SO	64	....	....	....	....	....	....	96'	107'	118'	128'

Caterpillar

D-2	60	....	60'	65'	....	....	80'	.....	.....	.....	.....
D-4	62	....	....	....	68'	....	83'	93'	104'	.....	.....
D-6	78	....	....	....	....	....	104'	117'	130'	.....	.....
D-7	72	....	....	....	....	....	....	108'	120'	132'	144'
D-8	76	....	....	....	....	....	....	114'	127'	140'	152'

Oliver-Cletrac

AG	58	....	58'	....	68'	....	78'	.....	.....	.....	.....
BD	60	....	....	....	70'	....	80'	90'	.....	.....	.....
BG	60	....	....	....	70'	....	80'	90'	.....	.....	.....
DD	62	....	....	....	....	....	83'	.....	.....	.....	.....
CG	62	....	....	....	....	....	83'	93'	104'	.....	.....
E	58	39'	....	63'	....	....	....	.....	.....	.....	.....
EN	58	39'	....	....	....	....	....	.....	.....	.....	.....
EW	58	39'	....	63'	....	....	....	.....	.....	.....	.....
FD	68	....	....	....	....	....	....	.....	114'	125'	136'
FG	68	....	....	....	....	....	....	.....	114'	125'	136'

International

T-6	TD-6	64	....	64'	....	75'	....	86'	96'	107'	.....	.....
T-9	TD-9	66	....	....	72'	77'	83'	88'	99'	110'	.....	.....
T-14	TD-14	72	....	....	....	....	....	96'	108'	120'	132'	144'
	TD-18	74	....	....	....	....	....	....	111'	124'	136'	148'

INCREASED TRACTION—MORE POWER LOWER REPLACEMENT COSTS

BULLDOG TRACTOR GRIP-LUGS are easily applied by welding to any shape or size grouser shoe. Either one of the three special sizes provides a re-tread for any steel wheel, track-laying or crawler type of equipment such as a tractor, half-track, shovel, crane, ditcher or bulldozer.

AC or DC Electric or Oxy-Acetylene welding may be used with any high grade steel all-purpose electrode. Welding costs are low, no high priced or special rods needed.

A QUICK, ECONOMICAL REPAIR

Dismantling the assembly for repair is unnecessary as BULLDOG GRIP-LUGS can be applied right on the job, usually in six to eight hours. The work can be done at night, saving "Time Out".

The special groove and bevel permits a sure grip weld, facilitates welding and controls amount of welding rod used.

LONG WEAR

BULLDOG TRACTOR GRIP-LUGS are made of a special work-hardening steel which becomes harder and tougher with use. They will outwear the original grouser on a new shoe. Grip-Lug comes in ten-foot lengths, there is practically no waste as proper lengths may be cut with a power saw or torch cut by the welder. Smaller pieces may be joined together and welded on one grouser.

ICE GROUSERS

The L-2 size is in popular use as an ice grouser. Short pieces are cut and a number of them stagger welded on the track-shoe to give extra grip on ice and snow removal work.

INCREASES PAYLOADS

Worn grousers cause loss in tractor efficiency as the tracks slide and slip over the terrain, causing loss of traction. BULLDOG TRACTOR GRIP-LUGS provide increased traction, permit heavier and more loads per day, save labor costs by speeding up the job.

RE-NU EDGE BARS FOR BULLDOZER BLADES

One application of L-2 Grip-Lug will prolong the life of your Bulldozer Blades by many months at savings of over 2,000% in blade costs.

The L-2 bar is butt-welded to the bottom edge of the blade on Bulldozer or Drag with an all-purpose high-grade steel electrode. Then this bead is covered with a thin layer of hard-surfacing electrode. Welding this bar around the corner or end castings of the Bulldozer is also recommended to give longer life to Bulldozer wearing parts.



L-2 SHARP

List Price	Cwt.	**$50.00**
Up to 499 lbs. Less 15%	Cwt.	**42.50**
500 to 1,999 lbs. Less 20%	Cwt.	**37.50**
2,000 and over. Less 25%		

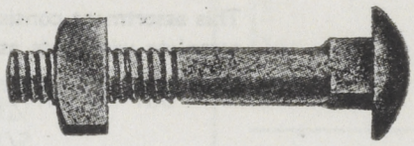
A-2, B-2 AND K-2 BLUNT

List Price	Cwt.	**$49.00**
Up to 499 lbs. Less 15%	Cwt.	**41.65**
500 to 1,999 lbs. Less 20%	Cwt.	**39.20**
2,000 and over. Less 25%	Cwt.	**36.75**

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Selected List of NUTS—BOLTS—WASHERS

CARRIAGE BOLTS

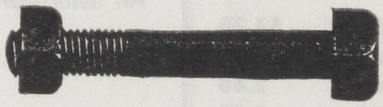


CUT THREAD

CUT THREAD
LIST PRICE PER 100

Length in Inches	3/16"	¼"	5/16"	⅜"	7/16"	½"	⅝"
1"	$1.28	$1.28	$1.92	$ 2.44			
1¼"	1.34	1.34	1.98	2.55			
1½"	1.39	1.39	2.08	2.72	$ 4.35	$ 5.34	$ 9.99
1¾"	1.56	1.56	2.32	3.02		5.75	
2"	1.56	1.56	2.32	3.02	4.70	5.75	10.57
2¼"	1.80	1.80	2.62	3.36		6.21	
2½"	1.80	1.80	2.62	3.36	5.13	6.21	11.15
2¾"		1.98	2.91	3.71			
3"	1.98	1.98	2.91	3.71	5.51	6.68	11.73
3¼"		2.15	3.19	4.07			
3½"		2.15	3.19	4.07	5.93	7.14	12.31
4"		2.67	3.43	4.42	6.27	7.61	12.90
4½"		2.84	3.95	4.77	6.68	8.08	13.47
5"		3.02	4.18	5.23	7.09	8.53	14.06
5½"		3.19	4.47	5.58		9.06	14.63
6"		3.36	4.70	5.93	7.90	9.52	15.22
6½"			6.74	8.66		13.40	
7"			7.08	9.14	11.96	14.03	19.36
7½"				9.55		14.64	
8"			7.70	10.04		15.26	20.76
8½"						16.57	
9"				10.92		17.19	22.13
10"				11.81		18.42	23.51
11"						19.66	
12"				13.75		20.91	

MACHINE BOLTS



CUT THREAD

CUT THREAD
LIST PRICE PER 100

Length in Inches	¼"	5/16"	⅜"	7/16"	½"	⅝"	¾"	⅞"	1"
1"	$1.34	$2.03	$ 2.72	$4.59	$ 5.34				
1¼"	1.46	2.10	2.84	4.77	5.58	$ 9.69			
1½"	1.51	2.27	3.02	4.94	5.81	9.99	$14.18		
1¾"			3.36	5.29	6.21	10.57			
2"	1.75	2.55	3.36	5.29	6.21	10.57	15.02	$22.79	
2¼"		2.84	3.71		6.68	11.15			
2½"	1.98	2.84	3.71	5.63	6.68	11.15	15.86	23.96	
2¾"					7.14	11.73			
3"	2.15	3.14	4.07	6.03	7.14	11.73	16.70	25.12	$34.58
3½"	2.38	3.43	3.08	6.39	7.56	12.31	17.54	26.29	
4"	2.91	3.66	4.77	6.88	7.96	12.90	18.38	27.45	37.55
4½"	3.08	4.18	5.11	7.14	8.42	13.47	19.22	28.62	
5"	3.26	4.42	5.58	7.56	8.89	14.06	20.08	29.78	40.53
5½"			5.93		9.35	14.68	20.92		
6"	3.60	4.87	6.27	8.30	9.81	15.22	21.76	32.12	43.50
6½"					13.95				
7"			9.43		14.50	19.38	24.38		49.37
7½"					15.19				
8"			10.31		15.82	20.76	26.67		52.53
9"			11.20		17.05	22.13	28.46		
10"					18.29	23.51	30.25		
11"					20.21	24.88	32.04		
12"					21.45	26.25	33.83		

Selected List of Nuts, Bolts, Washers

CARRIAGE AND MACHINE BOLT ASSORTMENTS



This assortment consists of 50 each Carriage and Machine Bolts complete with nuts as follows:

5 each Carriage Bolts
¼x2, 2½, 3 inch
5/16 x 2, 2½, 3 inch
⅜x2, 3, 4, 5 inch
5 each Machine Bolts
¼x2, 2½, 3 inch
5/16 x 2, 2½, 3 inch
⅜x2, 3, 4, 5 inch

No. CM100—Each **$2.15**

This assortment consists of 50 Carriage Bolts, complete with nuts, eight sizes as follows:

5 each, ¼x1½, 2 inch
5 each, 5/16 x 2, 3 inch
10 each, ⅜x3, 4 inch
5 each, ½x5, 6 inch

No. C50—Each **$1.75**

A larger assortment consisting of 100 Carriage Bolts as follows:

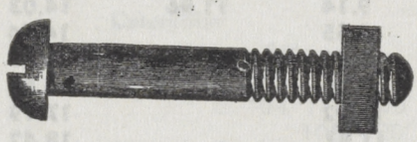
10, ¼x1½, 2, 2½, 3 inch
5 each, 5/16 x 1½, 2, 3, 4 inch
5 each, ⅜x2, 3, 3½, 4 inch
5 each, ½x4, 5, 6, 7 inch

No. C100—Each **$2.65**

This assortment consists of 50 Machine Bolts complete with nuts as follows:

5 each, 3/16 x 2, 2½, 3 inch
5 each, ⅜x2, 3, 4 inch
5 each, ½x3, 4, 5, 6 inch

No. M50—Each **$1.89**



Stove Bolts

Round and Flat Head Slotted

Per 100 Bolts

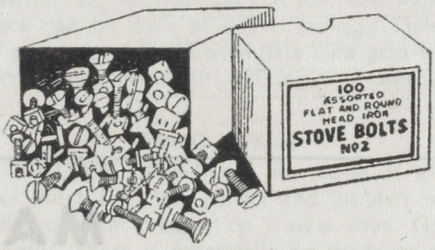
	⅛"	3/16"	¼"	5/16"	⅜"
½	$ .53	$ .62	$ .93		
⅝	.54	.65	.96		
¾	.55	.67	.99	$1.56	$2.28
⅞	.57	.70	1.02	1.62	2.34
1	.60	.72	1.03	1.68	2.40
1¼	.66	.78	1.14	1.80	2.58
1½	.72	.84	1.23	1.92	2.76
1¾	.78	.93	1.32	2.10	2.94
2	.87	1.05	1.44	2.28	3.12
2½		1.26	1.74	2.64	3.60
3		1.47	2.04	3.00	4.08
3½		1.68	2.34	3.30	4.56
4		1.89	2.64	3.72	5.04



Bolt Ends

Dia. Inches	Length Overall	Length Thread	Price Per lb.
½	8"	3"	PRICES ON APPLICATION
⅝	9"	3½"	
¾	10"	3½"	
⅞	11"	4"	
1	12"	4"	
1⅛	13"	4½"	
1¼	14"	4½"	
1⅜	15"	5"	
1½	16"	5"	
1⅝	17"	5½"	
1¾	18"	5½"	
2	20"	6"	

Stove Bolt Assortments



An assortment of 50 Stove Bolts consisting of the following:

5 each, 3/16 x ½, ¾-inch
5 each, 3/16 x ½, ¾-inch
5 each, ¼x3¼, 1-inch
Round Head
5 each, ¼x3¼, 1-inch
5 only, 5/16 x 1¼ inch
5 only, 5/16 x 1¼ inch
Flat Head

No. 1—Each ..... **$ .60**

A larger assortment containing 100 Stove Bolts consisting of the following:

10 each, 3/16 x ½, ¾-inch
10 each, ¼x¾, 1-inch
Round Head
10 each, 3/16 x ¾, 1-inch
10 each, ¼x1, 1¼, 1½-inch
Flat Head

No. 2—Each **$1.00**

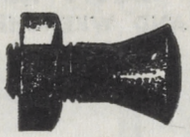
We are in a position to supply you with all types of nuts, bolts and washers. If your particular requirements are not listed, please do not hesitate to write for a manufacturers catalogue. We will be only too glad to forward one to you on request.

ALL PRICES ON THIS PAGE ARE NET

SELECTED LIST of NUTS, BOLTS, WASHERS

PLOW BOLTS

No. 3 and 7 Heads



¾ and ⅞ stocked in No. 3 only. List Price Per 100

Length Inches	Diameter, Inches 3/8"	7/16"	½"	5/8"	¾"	⅞"
1"	$3.04	$4.37	$6.12	$12.60		
1¼"	3.21	4.67	6.41	13.06		
1½"	3.39	4.96	6.70	13.53		
1¾"	3.56	5.23	7.00	14.46	$19.13	
2"	3.73	5.55	7.70	15.40	19.94	
2½"	4.08	6.59	8.45		21.58	$31.03
3"					23.21	31.03
3½"						35.46

TIRE BOLTS

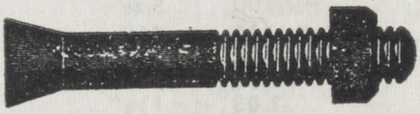


FLUTED BOLT

List Price Per 100

Length Inches	Diameter, Inches 3/16"	¼"	5/16"
1¾"	$ .97	$1.51	
2"	1.05	1.59	
2½"		1.73	$2.43
3"		1.88	2.64
3½"		2.64	2.85
4"			3.05

SLEIGH SHOE BOLT

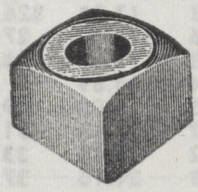


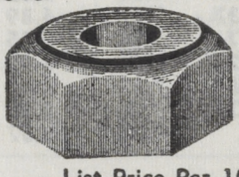
TIRE BOLT HEAD

List Price Per 100

Length Inches	3/8"	½"	5/8"
3"	$ 3.92		
3½"	4.21		
4"	4.52		
4½"	4.83		
5"	5.12		
5½"	5.43		
6"	5.72		
6½"	10.54		
7"	11.08		
7½"	11.22		
8"	12.05	$13.86	$17.70
9"	13.02	14.82	18.74
10"		15.74	19.80
11"			20.82
12"		13.22	21.89

HOT PRESSED NUTS





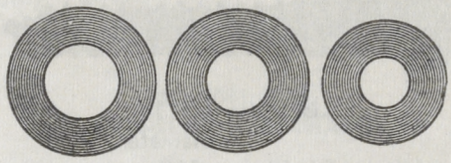
List Price Per 100

		Sqr. Tapped Oversize	Sqr. Tapped U.S.S.	Hex Tapped U.S.S.
¼"			$46.28	$67.40
5/16"	Per Cwt.	$53.13	41.43	64.13
⅜"	"	42.36	33.05	59.00
7/16	"	38.57	32.72	53.46
½"	"	47.15	32.38	51.20
9/16"	"	38.44	29.99	39.33
⅝"	"	33.58	26.20	34.86
¾"	"	29.19	22.81	31.06

HOT PRESSED NUTS (Continued)

For Bolt	Sqr. Tapped Oversize	Sqr. Tapped U.S.S.	Hex Tapped U.S.S.
⅞"	$29.19	$22.81	$31.06
1"	28.73	22.46	30.73
1⅛"	29.06	23.46	32.06
1¼"	29.06	22.73	31.06
1½"		24.98	33.20

STEEL WASHERS



List Price Per Lb.

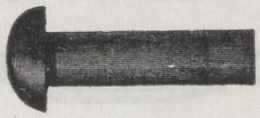
For Bolt	3/16"	¼"	5/16"	⅜"	7/16"	½"
Per lb.	$ .29	$ .25	$ .23	$ .20	$ .17	$ .16
For Bolt		9/16"	⅝"	¾"-1"		1⅛"
Per lb.		$ .16	$ .16	$ .15		$ .18
For Bolt	1¼"	1⅜"	1½"	1⅝" or larger		
Per lb.	$ .18	$.18	$ .18	$ .18		

THIN STEEL WASHERS

List Price Per Lb.

For Bolt	3/16"	¼"	5/16"
Per lb.	$ .44	$ .42	$ .41

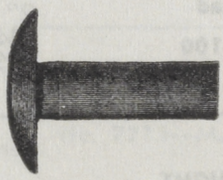
ROUND HEAD RIVETS



List Price Per Lb.

	Diameter, Inches 3/16"	¼"	5/16"	⅜"	7/16"
⅜"	$ .36				
½"	.35	$ .30	$ .29	$ .29	
⅝"	.32	.30	.29	.29	
¾"	.31	.29	.29	.28	
⅞"		.29	.29	.28	
1"	.30	.29	.28	.27	$ .27
1¼"	.30	.29	.28	.27	.27
1½"	.30	.29	.29	.27	.27
1¾"		.29	.28	.27	
2"	.33	.30	.29	.29	.29
2¼"		.30			
2½"		.30	.29	.29	
2¾"	.33	.30	.29		
3"	.33	.30	.29	.29	
3¼"	.33	.30		.29	
3½"	.33			.29	
4"	.36	.31		.29	

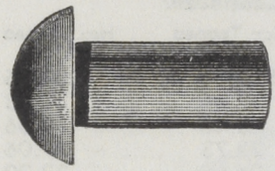
WAGON BOX HEAD RIVETS



List Price Per Lb.

Diameter, Inches	⅝"	¾"	⅞"	1"	1¼"	1½"	1¾"
3/16" List per lb.				.30		.30	
¼" List per lb. .30	.29	.29	.29	.29	.29	.29	.29
Diameter, Inches	2"	2¼"	2½"	3"	3½"	4"	
¼"List per lb.	.30	.30	.30	.30	.30	.31	

Selected List of Nuts, Bolts, Washers



BOILER RIVETS

	List Price per lb.
½"	$ .20
⅝"	.20
¾"	.20

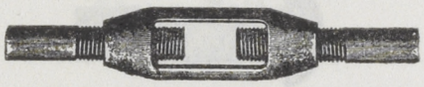
COACH AND LAG SCREWS



List Price per 100

Length	Diameter ¼"	5/16"	⅜"	½"	⅝"
1"	$2.97	$2.97			
1¼"	2.97	2.97			
1½"	2.73	2.73	$3.29		
1¾"	2.87	2.97			
2"	2.97	2.97	3.60	$ 5.64	
2½"	3.23	3.23	3.93	6.15	
3"	3.55	3.55	4.31	6.72	$ 9.50
3½"	3.87	3.87	4.69	7.28	10.32
4"	4.19	4.19	5.07	7.85	11.14
4½"			5.45	8.42	
5"			5.88	9.00	12.80
6"			6.77	10.13	14.44
7"				11.28	16.09
8"				12.41	17.73

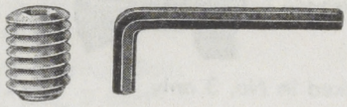
DROP FORGED TURN BUCKLES



With Stub Ends — R and L Thread

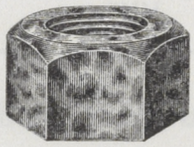
⅜". Each	$ 1.08
½". Each	1.31
⅝". Each	1.38
¾". Each	1.85
⅞". Each	2.23
1". Each	2.75
1⅛". Each	3.48
1¼". Each	3.22
1½". Each	4.69
2". Each	11.58

ALLEN HOLLOW SAFETY HEAD SET SCREWS AND WRENCHES



Set Screws Length	Price per 100 ¼	5/16	⅜	½
¼"	$4.90	$4.95	$5.00	
5/16"	4.95	5.00	5.05	
⅜"	5.00	5.05	5.10	$6.94
7/16"	5.05	5.10	5.33	7.03
½"	5.10	5.30	5.56	7.14
⅝"	5.45	5.71	6.02	7.75
¾"	5.81	6.12	6.48	8.36
⅞"	6.17	6.53	6.94	
1"	6.53	6.94	7.40	
1¼"	7.24	7.75		
Wrenches				
Price, Each	.03	.04	.05	.08

STEEL SEMI FINISHED NUTS



Right Hand Thread

Size	List Per 100	Size	List Per 100
¼"	$ .91	¾"	8.59
5/16"	1.04	⅞"	13.73
⅜"	1.32	1"	19.92
7/16"	1.83	1⅛"	18.98
½"	2.31	1¼"	25.88
9/16"	4.11	1⅜"	36.23
⅝"	5.25	1½"	47.15

Left Hand Thread

Size	List Per 100	Size	List Per 100
½"	$ 5.25	1"	27.78
⅝"	7.89	1⅛"	40.51
¾"	13.51	1¼"	55.51
⅞"	20.25	1⅜"	77.25

SET-SCREWS

Cap Point Case Hardened

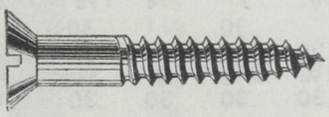


U.S.S. Cut Thread

List Price per 100

Length	Diameter of Screw in Inches ¼"	5/16"	⅜"	7/16"	½"	9/16"	⅝"	¾"
⅜"	$3.13	$3.53						
½"	3.13	3.53	$4.09	$ 5.99				
⅝"	3.19	3.59	4.15	5.99	$ 7.35			
¾"	3.25	3.59	4.20	6.11	7.45			
⅞"	3.47	3.80	4.49	6.21	7.56	12.70		
1"	3.64	3.97	4.81	6.33	7.66	12.93	13.38	$26.99
1¼"	4.03	4.37	5.37	6.89	8.50	13.16	13.61	27.51
1½"	4.43	4.71	5.88	7.45	9.34	13.38	13.82	28.02
1¾"	4.76	5.27	6.61	8.12	10.18	14.44	14.89	
2"	5.09	5.83	7.33	8.85	10.87	15.45	15.90	29.05
2¼"		6.33	8.00	9.60	11.86	16.62	17.13	31.22
2½"			8.68	10.57	12.77	17.92	18.48	33.39
3"					13.82	20.43	21.10	37.56

FLAT HEAD BRIGHT STEEL WOOD SCREWS



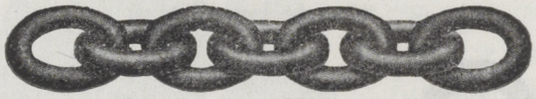
List Price Per Gross

Length	Diameter of Screw in Inches 4	5	6	7	8	9	10	12	14
½"	$ .49	$ .49	$ .50	$ .53	$ .57				
⅝"	.50	.50	.53	.55	.59				
¾"	.53	.53	.55	.59	.63	$ .71	$ .77	$ .89	
⅞"	.55	.53	.59	.63	.67	.75	.81	.97	
1"	.59	.58	.64	.69	.72	.77	.85	1.04	$1.29
1¼"		.71	.75	.76	.80	.85	.95	1.13	1.47
1½"			.81	.84	.89	.97	1.04	1.25	1.63
1¾"					.99	1.08	1.16	1.40	1.80
2"							1.27	1.55	1.96

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

CHAIN AND CHAIN HOOKS

STRAIGHT LINK COIL CHAIN



Proof Quality—Electric Smooth Weld

No. 200

Size Inches		Links Per Ft.	Weight 100 Ft.	Proof Test	Breaking Test	List Price Per Cwt.
3/16	Exact	17	30	998	1800	**$38.07**
¼	Exact	13.5	53	1620	3000	**34.75**
3/16	Full Size	12 ½	38	1000	2000	**30.26**
¼	Full Size	11.5	75	1650	3300	**28.13**
5/16	Full Size	9.9	110	2650	5300	**27.26**
⅜	Full Size	8.40	145	3700	7500	**24.93**
7/16	Full Size	8	210	5100	10200	**24.53**
½	Full Size	7.3	265	6700	13400	**25.46**
⅝	Full Size	5.50	400	10500	21000	**23.93**

No. 210

B.B.B. Quality—Fire Weld

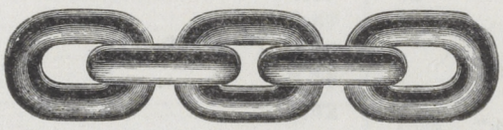
Size Inches	Links Per Ft.	Wt. Per 100 lbs.	Proof Test	Breaking Test	List Price Per Cwt.
¾		615	15500	33500	**$28.37**
⅞	4¾	820	21000	44000	**27.55**
1	4½	1030	28500	59000	**26.51**

ELECTRIC WELD LOGGING CHAIN

	Size	Wt., lbs.	List Each
No. 121 Less Swivel	¼x14 ft.	10½	**$ 3.33**
	5/16x14 ft.	16	**4.13**
	⅜x14 ft.	23	**5.80**
	7/16x14 ft.	32	**7.80**
	½x14 ft.	41	**9.06**

	Size	Wt., lbs.	List Each
No. 120 With Swivel	¼x14 ft.	10½	**$ 4.27**
	5/16x14 ft.	16	**5.07**
	⅜x14 ft.	23	**6.40**
	7/16x14 ft.	32	**9.80**
	½x14 ft.	41	**10.86**

HERCULES LOADING CHAIN



Size Inches	List per 100 lbs.
7/32	**$64.31**
¼	**54.21**
9/32	**50.97**
5/16	**41.40**
⅜	

DREADNOUGHT HITCHING CHAIN



B.B. Coil

Size Inches	Links Per Ft.	Wt., Per 100 Ft.	Proof Test	Breaking Test	Per 100 lbs.
9/32	16	78	1650	3300	**$31.06**

HARROW BAR CHAINS



A complete chain consisting of one Eye Bolt. ⅜x6 or ⅜x8 and 3 links of 5/16 Bright Chain.

	List Price, Per Doz. 6 inches	8 inches
Complete Chain. List Doz.	**$2.53**	**$2.60**
Eye Bolts Only. List Doz.	**1.44**	**1.52**
Links. 3 Only	**1.13**	**(9.33 per 100)**

WAGON BOX ANTI-SPREADER CHAINS



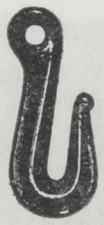
In two pieces, with eye bolts, which are threaded, with nuts.

No.	Size	Length	Finish	Wt., Doz.	Per Doz.
1/0	3/16"	36"	Bright	16 lbs.	**$4.47**



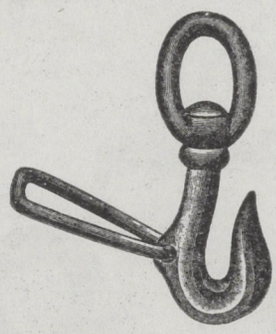
SLIP HOOKS

For Chain, Ins.	¼	5/16	⅜	7/16	½	⅝	¾
Wt. per 100		120	160	210	400		1500
List Price, Ea.	**.20**	**.25**	**.32**	**.43**	**.59**	**1.40**	**2.16**



GRAB HOOKS

For Chain, Ins.	¼	5/16	⅜	7/16	½	⅝	¾
Wt. per 100		75	125	290	300		900
List Price, Ea.	**.20**	**.25**	**.32**	**.43**	**.59**	**1.40**	**2.16**

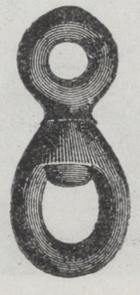


No. 86

SWIVEL GRAB HOOK

With Hand Ring

Size Ring, Inches	⅝
Weight, Each	3⅜ lbs.
List Price, Each	**$2.07**



CHAIN SWIVEL

No. 7715—Malleable Iron

	A	B	C	D
Eye, Inches	⅜	½	⅝	
For Chain, Inches	5/16	⅜	7/16	½
List Price, Each	**.67**	**.67**	**.87**	**1.07**

CHAIN AND CHAIN HOOKS



NO. 343 COLD SHUTS

Made from open hearth steel.

For Chain, Ins.
¼" 5/16" ⅜" 7/16" ½" ⅝"

List Price Per 100 Pcs.
8.20 8.80 10.60 11.20 14.80 27.39

NO. 2530 SWIVEL CLOSING LINKS
Malleable Iron Polished



Nos.	A	B	C
For Chain, Ins.	¼"	5/16"	⅜"
Wt. Per Doz. Lbs.	1⅛	1⅞	2⅝
List Per Doz.	**2.93**	**3.00**	**3.93**

Nos.	D	F
For Chain, Ins.	7/16"	½"
Wt. Per Doz. Lbs.	4⅞	7⅛
List Per Doz.	**6.07**	**8.46**

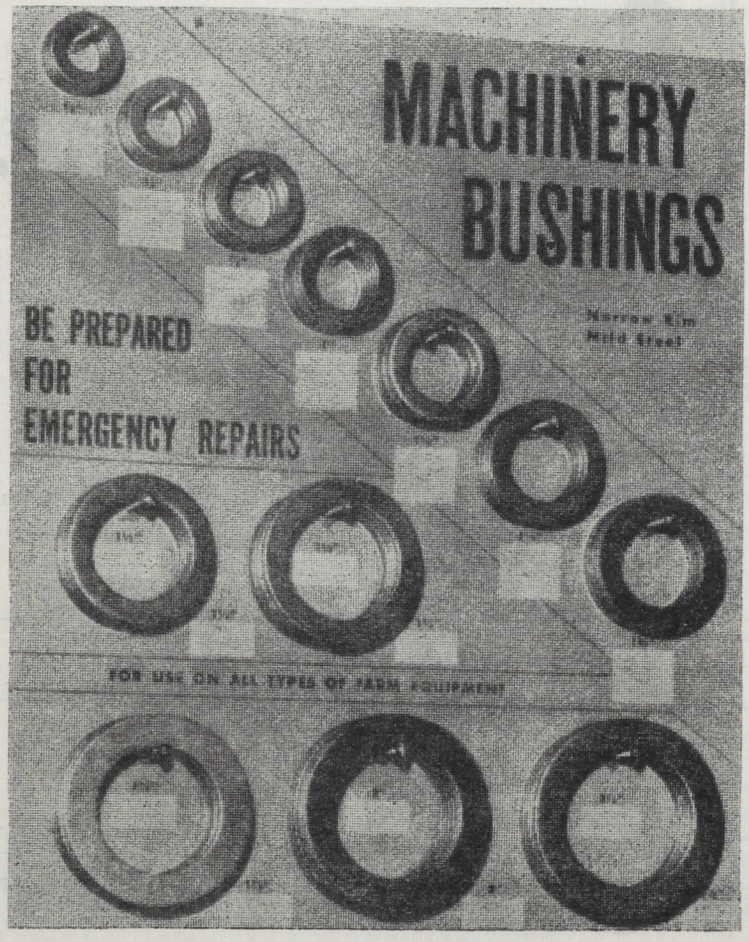
LAP REPAIR LINKS
Wrought Iron Polished



Size Inches	Wt. Per Doz Lbs.	List Price Doz.
¼"x1½"	¾	**$ .64**
5/16"x1½"	1¼	**.87**
⅜"x1½"	2½	**1.33**
½"x1½"	6	**2.36**



MACHINERY BUSHINGS



18 Gauge

Size	List per 100
⅝"	**$ .88**
¾"	**.89**
⅞"	**1.19**
1"	**1.40**
1⅛"	**1.45**
1¼"	**1.67**
1⅜"	**1.87**
1½"	**1.96**

14 Gauge

Size	List per 100
1"	**$1.60**
1⅛"	**1.85**
1¼"	**2.01**
1⅜"	**2.29**
1½"	**2.45**
1⅝"	**2.91**
1¾"	**3.07**
1⅞"	**3.75**
2"	**3.87**
2¼"	**4.67**
2½"	**5.28**

MACHINERY BUSHING ASSORTMENTS

	List Price
No. 21. Contains 21 Bushings in sizes ⅝" - 2½"	**$ .77**
No. 56. Contains 56 Bushings in sizes ⅝" - 2½"	**1.55**

GRINDING WHEELS



EXCELITE

"Excelite" is a trade name for Oxide of Aluminum in crystalline formation. It is produced by fusing Bauxite in the intense heat of an electric furnace. Only the highest quality of abrasive grain is used in "Excelite Wheels." It's physical formation is such that it leaves sharp cutting points when fractured. This characteristic makes it most efficient for grinding all kinds of steel and materials of high tensile strength.

For Tool Grinding

NO. 24N GRIT

Thickness	Diam. Ins.	List Price
¾"	10	$6.28

NO. 36P GRIT

Thickness	Diam. Ins.	List Price
¾"	6	$3.04
¾"	7	3.73
¾"	8	4.47
1"	6	3.47
1"	7	4.25
1"	8	5.20
1"	10	7.32
1¼"	8	6.07
1¼"	10	8.71
1½"	8	6.93

NO. 46N GRIT

Thickness	Diam. Ins.	List Price
½"	3	$ .90
½"	4	1.52
½"	5	2.17
½"	6	2.60
¾"	3	1.04
¾"	4	1.77
¾"	5	2.52
¾"	4	3.04
1"	4	2.04
1"	5	2.87
1"	6	3.47
1"	7	4.25
1"	8	5.20
1"	10	7.32

NO. 46.0 GRIT

Thickness	Diam. Ins.	List Price
1"	8	$5.20

NO. 60N GRIT

Thickness	Diam. Ins.	List Price
½"	3	$ .90
½"	4	1.52
½"	5	2.17
½"	6	2.60
¾"	3	1.04
¾"	4	1.77
¾"	5	2.52

NO. 60N GRIT (Continued)

Thickness	Diam. Ins.	List Price
¾"	6	3.04
¾"	7	3.73
¾"	8	4.47
1"	4	2.04
1"	5	2.87
1"	6	3.47
1"	7	4.25
1"	8	5.20
1"	10	7.32
1¼"	8	6.07
1¼"	10	8.71

NO. 80N GRIT

Thickness	Diam. Ins.	List Price
½"	3	$ .90
½"	4	1.52
½"	6	2.60

For Skate Grinding

NO. 80N GRIT

Thickness	Diam. Ins.	List Price
¾"	3	$1.04
¾"	4	1.77

NO. 120N GRIT

Thickness	Diam. Ins.	List Price
¾"	3	$1.04
¾"	4	1.77

NO. 150N GRIT

Thickness	Diam. Ins.	List Price
¾"	3	$1.04
¾"	4	1.77

For Saw Gumming

NO. 46N GRIT
Round Face

Thickness	Diam. Ins.	List Price
⅜"	6	$2.69
⅜"	8	3.77
⅜"	10	5.16
5/16"	6	2.69
5/16"	8	3.77
5/16"	10	5.16

For Ploughshare Grinding

NO. 30P GRIT

Thickness	Diam. Ins.	List Price
1½"	12	$13.83
2"	10	10.09
2"	12	17.72
2"	14	23.61

NO. 36P GRIT

Thickness	Diam. Ins.	List Price
1½"	10	$10.09
1½"	12	13.83
2"	10	12.83
2"	12	17.72
2½"	12	21.59

NO. 46.0 GRIT

Thickness	Diam. Ins.	List Price
1½"	10	$10.09
1½"	12	13.83
2"	10	12.83
2"	12	17.72

Wheels for Ploughshare Grinding will be shipped with 1¼" Arbor Hole unless otherwise specified.

Cup Grinding Wheels

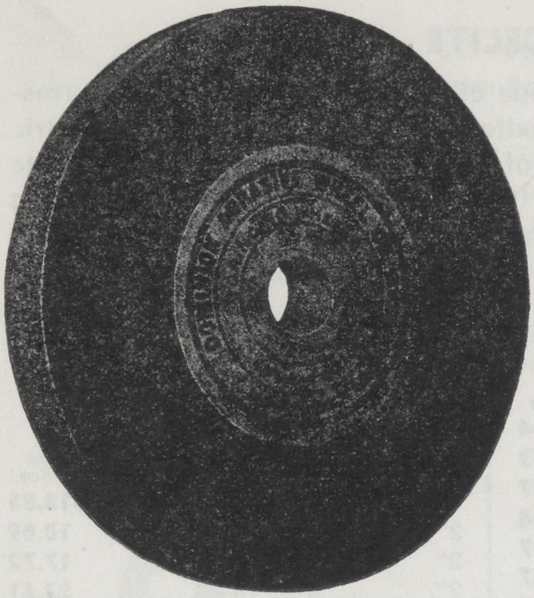
Cupped stone as used with Disc Grinding Attachment for Floor Grinders.

Thickness	Diam. Ins.	List Price
3	12	Application

* * *

We are in a position to supply all your grinding requirements. Refer to our Machinery and Supplies Section, for the ideal grinders for use with these wheels. A specialist is on hand at all times to help you with your problems. Please do not hesitate to take advantage of this "SERVICE".

RESINOID WHEELS



The particular feature of grinding wheels made of a synthetic resin bond is their ability to withstand high speeds: 15,000 surface feet per minute, compared to Vitrified or Silicate bond wheel speeds of not more than 5,000 to 6,000 surface feet per minute. The resinous nature of the bond permits the manufacture of very thin wheels for cutting off purposes. They can be made very thin, which is not possible in Vitrified or Silicate bonded wheels. In addition to this, these thin wheels will stand considerable side strain without breaking.

THICKNESS OF WHEEL IN INCHES

Diameter in Inches	3/32	1/8	1/4	3/8	1/2	5/8	3/4	7/8
1	$ .55	$ .60	$ .65	$ .70	$ .75	$ .80	$ .85	$ .90
1 1/2	.60	.65	.70	.80	.85	.90	.95	1.00
2	.65	.70	.75	.90	.95	1.00	1.05	1.10
2 1/2	.70	.80	.85	1.00	1.05	1.10	1.15	1.20
3	.80	.90	1.00	1.15	1.20	1.25	1.35	1.45
3 1/2	.90	1.00	1.15	1.30	1.40	1.50	1.65	1.75
4	1.00	1.10	1.30	1.45	1.60	1.75	1.95	2.10
4 1/2	1.10	1.20	1.45	1.70	1.85	2.05	2.25	2.50
5	1.20	1.30	1.60	1.95	2.15	2.35	2.55	2.95
6	1.30	1.45	1.80	2.30	2.55	2.80	3.05	3.55
7	1.50	1.65	2.10	2.70	3.00	3.30	3.60	4.25
8	1.70	1.90	2.45	3.15	3.60	4.05	4.50	5.25
9	2.00	2.25	2.85	3.65	4.25	4.80	5.40	6.45
10	2.45	2.70	3.45	4.45	5.20	5.95	6.70	7.90
12	3.35	3.70	4.90	5.90	6.90	7.90	8.90	10.20
14	4.45	4.95	6.45	7.55	8.70	9.90	11.40	13.60
16		6.25	8.00	9.60	11.15	13.65	16.15	19.10
18		8.00	9.50	12.00	14.50	18.00	21.50	25.00

THICKNESS OF WHEEL IN INCHES

Diameter in Inches	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	3
1	$ .95	$ 1.00	$ 1.10	$ 1.20	$ 1.30			
1 1/2	1.05	1.10	1.20	1.30	1.40			
2	1.15	1.25	1.35	1.45	1.55	$ 1.65	$ 1.75	$ 1.95
2 1/2	1.25	1.40	1.50	1.70	1.85	2.00	2.15	2.45
3	1.55	1.70	1.80	2.00	2.15	2.35	2.55	2.95
3 1/2	1.85	2.05	2.25	2.45	2.65	2.90	3.15	3.65
4	2.25	2.50	2.75	3.00	3.25	3.55	3.85	4.45
4 1/2	2.75	3.05	3.35	3.65	3.95	4.30	4.65	5.35
5	3.35	3.70	4.05	4.40	4.75	5.15	5.55	6.35
6	4.05	4.50	5.15	5.70	6.26	6.80	7.35	8.65
7	4.90	5.60	6.50	7.30	8.10	8.80	9.50	11.10
8	6.00	6.90	8.00	9.00	10.00	11.00	12.00	14.00
9	7.40	8.55	9.90	11.15	12.40	13.65	14.90	17.40
10	9.10	10.50	12.10	13.60	15.10	16.70	18.30	21.50
12	11.80	13.80	16.00	18.10	20.20	22.50	24.80	29.30
14	15.75	18.60	21.65	24.60	27.00	30.00	32.60	37.70
16	22.00	25.00	28.00	31.00	34.00	37.50	41.00	48.00
18	28.50	32.00	35.50	39.50	44.00	48.50	53.00	62.00

GRINDING SUPPLIES

Master Wire Wheel Brushes

Built as a complete unit. The assembly of steel sections is firmly fastened between two gripping face plates. These face plates are brought together and fastened weight 8 clamping mmebers under 7,000 lbs. pressure. The assembly of 6 and 4-inch diameter sections differs slightly from the larger sizes because of the shorter trim.

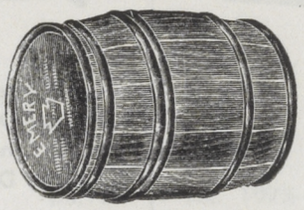
Adapters with the correct size arbor hole are supplied with each wheel. They are easily snapped into the standard 2-inch opening and the Master Wheel slipped on or off. Furnished in ½, ⅝, ¾, ⅞, 1, 1⅛, 1¼, 1⅜, 1½ and 1¾-inch sizes. When ordering, state size wanted.

Nos.	151	152	153	154	157
Diam., Ins.	12"	10"	8"	6"	4"
Width Face, Ins.	2	1¾	1½	1	¾
No. Secs.	4	4	3	3	3
List Price, Each	**$13.83**	**$11.10**	**$5.71**	**$4.80**	**$3.15**

EXTRA ADAPTER

Arbor Hole	½	¾	Arbor Hole	1	1¼
List Price	**$ .44**	**$ .44**	List Price	**$ .44**	**$ .44**

EMERY POWDER



LIONITE ABRASIVE

Best for polishing plow shares or metal with high tensile strength. The crystals have an action similar to that of a file and actually cut rather than rub away the surface of the material being polished.

	List Price
Lionite No. 30. Per lb.	**$ .40**
Lionite No. 40. Per lb.	**.40**
Lionite No. 80. Per lb.	**.40**

AMERICAN

120 Grain, extra fine.
List Price, per lb. **$ .21**

MUSLIN POLISHING WHEELS



Made of Muslin cloth stitched and cemented to within one to three inches of edge. Surface is very soft and yielding, suitable for polishing plow shares and uneven surfaces.

Diameter, Inches	10	12
Thickness, Inches	2	2
List Price, Each	**$11.06**	**$18.93**

CANVAS POLISHING WHEELS

Made of heavy Canvas Duck, lock stitched in circles, making a more flexible and yielding face than a solid canvas wheel. Makes a very efficient general purpose polishing wheel.

Diameter, Inches	10	12
Thickness, Inches	2	2
List Price, Each	**$10.53**	**$15.66**

EMERY WHEEL DRESSER



For trueing, shaping, and removing glaze from grinding wheels while running at full speed. Complete with one set of cutting wheels, black iron handle.
List Price, Each **$2.20**

Extra Cutters

Cutting Wheels, sets of 4.
List Per Set **$ .21**

FACTS ABOUT GRINDING WHEELS

SAFETY

Great care should be taken in the use of grinding wheels. Before a wheel is mounted it should be rung (struck for sound and tone) to see that it is not cracked. Never force a wheel on the arbor; see that it has a running fit. Use collars or flanges at least a third of the wheel diameter, and be absolutely sure these collars are true, contacting the same on both sides of the wheel.

Our wheels are thoroughly tested and inspected before leaving the factory. However, since all grinding wheels are of a fragile nature, if subjected to rough handling they are easily fractured and may cause serious injury if mounted carelessly. When a new wheel has been mounted the operator should stand away from the machine until the wheel attains full running speed. The use of guards for all wheels is strongly recommended. (For full details, see "Safety Code for the use, care, and protection of abrasive wheels"

One thing to be remembered is the fact that all reputable wheel manufacturers make good grinding wheels. A suitable wheel can be supplied if the proper grain and grade is selected. It has been proven that a 60/N wheel satisfactory for a man sharpening tool bits can be entirely too soft or too hard for the man next door doing apparently the same work. This is due perhaps to his tool bits being smaller or larger, or his machine running at a different speed.

Suggestions for Ordering

Unless through past experience the exact grain, grade and kind of abrasive required is known, we suggest leaving the selection to us, giving us the following information:

Diameter and thickness of wheel.
Size of arbor hole.
Shape of face.
Grain and grade
Wet or dry grinding.
Kind of material to be ground.
If a cup wheel, thickness of rim and back.
If a cylinder wheel, thickness of rim.
Kind of machine used.
Speed of spindles.
Speed of work.

GRAIN (OR "GRIT") OF GRINDING WHEELS

Very Coarse	Coarse	Medium	Fine	Very Fine
8	14	30	60	100
10	16	36	70	120
12	20	46	80	150
	24		90	180

FILES AND DRILL BITS

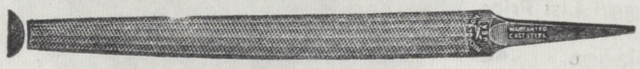


FLAT—BASTARD

Length, Ins.	4"	6"	8"	10"
List, per Doz.	$ 3.67	$ 4.35	$ 5.57	$ 7.61
Length, Ins.	12"	14"	16"	
List, per Doz.	10.20	13.60	17.53	

FLAT—SMOOTH

Length, Ins.	8"	10"	12"	14"
List, per Doz.	$ 7.20	$ 9.93	$13.20	$16.86



HALF ROUND—BASTARD

Length, Ins.	4"	6"	8"	10"
List, per Doz.	4.35	4.89	6.67	9.25
Length, Ins.	12"	14"	16"	
List, per Doz.	12.24	15.22	19.17	

HALF ROUND—SMOOTH

Length, Ins.	8"	10"	12"	14"	16"
List, per Doz.	$ 7.89	$10.60	$13.86	$17.13	$21.75

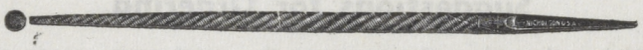


MILL—BASTARD

Length, Ins.	4"	6"	8"	10"
List, per Doz.	2.59	3.93	5.33	6.67
Length, Ins.	12"	14"	16"	
List, per Doz.	8.57	11.29	17.00	

MILL—SMOOTH

Length, Ins.	8"	10"	12"	14"
List, per Doz.	$ 6.00	$ 7.61	$ 9.52	$12.24

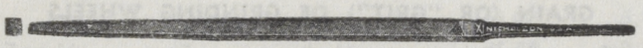


ROUND—BASTARD

Length, Ins.	4"	6"	8"	10"
List, per Doz.	3.27	4.35	4.63	5.33
Length, Ins.	12"	14"	16"	
List, per Doz.	7.20	9.93	14.82	

ROUND—SMOOTH

Length, Ins.	8"	10"	12"	14"	16"
List, per Doz.	$ 4.63	$ 5.33	$ 7.20	$ 9.93	$14.82



SQUARE BASTARD

Length, Ins.	4"	6"	8"	10"
List, per Doz.	$4.35	$ 4.89	$ 5.57	$7.50
Length, Ins.	12"	14"	16"	
List, per Doz.	9.52	12.24	15.50	



SLIM TAPER

Length, Ins.	4"	4½"	5"	5½"
List, per Doz.	$3.00	$3.00	$3.27	$3.40
Length, Ins.	6"	7"	8"	
List, per Doz.	3.67	4.35	4.89	

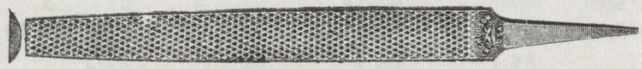
EXTRA SLIM TAPER

Length, Ins.	4"	4½"	5"	5½"
List, per Doz.	$3.00	$3.00	$3.27	$3.40
Length, Ins.	6"	7"	8"	
List, per Doz.	3.67	4.35	4.89	



REGULAR TAPER—SINGLE CUT

Length, Ins.	4"	4½"	5"
List, per Doz.	$3.00	$3.00	$3.67
Length, Ins.	6"	7"	8"
List, per Doz.	4.35	5.33	6.67



HALF ROUND CABINET

Length, Ins.	14"
List, per Doz.	$20.79

SPECIAL CROSS CUT

Intended especially for use in filing cross-cut saws.

Length, Ins.	8"
List, per Doz.	$4.70



WARDING BASTARD

Length, Ins.	4"	6"
List, per Doz.	$3.67	$5.33

CANT SAW

Used for sharpening Combination or Novelty Circular Saws.

Length, Ins.	8"
List, per Doz.	$8.29

WEB SAW

Made for filing and sharpening Web Saws and Pulpwood Saws.

Length, Ins.	5½"
List, per Doz.	$4.73

LONG ANGLE LATHE

Specially designed for fine finishing on Lathe work.

Length, Ins.	14"
List, per Doz.	$17.40

FLAT FOUNDRY

Specially designed for filing scale surfaces, removing burs, fins and sprues from iron castings.

Length, Ins.	14"
List, per Doz.	$13.60

FILES AND DRILL BITS

Counter Sink Bits



With 1½ inch round shank. Angle of point is tire bolt taper, 600 degree.

No. 135A—

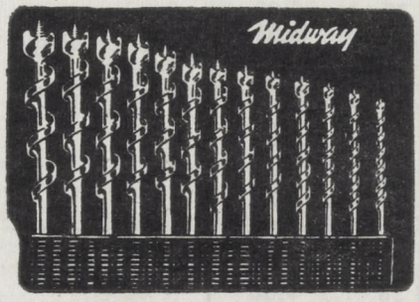
Size, Ins.	5/8	3/4	7/8
List Each	**$2.06**	**$2.73**	**$3.13**

Combined Drill and Counter Sink



No. 107B—7/32 and 9/32 inc. List Each **$1.13**

AUGER BITS



Precision manufactured and finished in gleaming Mirror Bright "MIRBRITE".

Size, Ins.	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"
List Price	**$ .95**	**$ .95**	**$ .95**	**$1.05**	**$1.05**	**$1.15**	**$1.16**

Size, Ins.	11/16"	3/4"	13/16"	7/8"	15/16"	1"
List Price	**$1.25**	**$1.26**	**$1.41**	**$1.43**	**$1.60**	**$1.63**

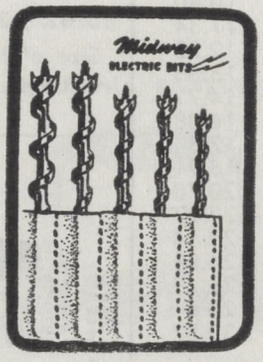
Also available in sets as follows:

Deluxe Set No. 50-13—Contains 13 bits from 1/4" to 1". Packed in high grade imitation leather roll.
List Price **$17.00**

Set No. 50-5—Set of 5 drills, consists of one each of the following: 1/4", 3/8", 1/2", 5/8", 3/4". Packed in a handy compact leather roll.
List Price **$6.00**

Farmers' Auger Bit Set No. 5-F-G—A special Auger Bit Set to meet the demand for a low-priced Auger Bit Set of the sizes most often used for farm use. Consists of one each of the following: 1/4", 3/8", 1/2", 5/16" and 3/4", packed in a sturdy canvas roll with tie strings.
List Price **$4.65**

ELECTRIC AUGER BITS



Specially forged for use with electric drills. Mirbrite or Blaconic finish. Blaconic finish is a special finish which prevents rusting.

Size, Ins.	1/4"	5/16"	3/8"	7/16"	1/2"	9/16"	5/8"
Mirbrite. List Price	**$ .95**	**$ .95**	**$ .95**	**$1.05**	**$1.05**	**$1.15**	**$1.16**
Blaconic. List Price	**.95**	**.95**	**.95**	**1.05**	**1.05**	**1.15**	**1.16**

Size, Ins.	11/16"	3/4"	13/16"	7/8"	15/16"	1"
Mirbrite. List Price	**$1.25**	**$1.26**	**$1.41**	**$1.43**	**$1.60**	**$1.63**
Blaconic. List Price	**1.25**	**1.26**	**1.41**	**1.43**	**1.60**	**1.63**

Also available in sets as follows:

Set No. 40-E-5—5 Piece Mirbrite Set. Contains one each of the following: 1/4", 5/16", 3/8", 7/16", 1/2" bits for use with 1/4" or 1/2" chucks. Packed in handy imitation leather roll.
List Price **$5.65**

Also available in "BLACONIC" electronic oxide finish.
Set No. 40-E-B—List Price **$5.65**

Set No. 40-E-6—6 Piece Set. Contains one each of the following: 3/8", 1/2", 5/8", 3/4", 7/8" and 1" for use with 1/2" chuck. Packed in handy leather imitation roll.
List Price **$8.50**

We are in a position to service your needs for all types of drills, and bits. Owing to lack of space we were not able to list all of our stock. If your particular requirements or requirement parts are not listed, please contact

D. ACKLAND & SON LTD.

Winnipeg, Man.

or our nearest Branch Office.

FILES AND DRILL BITS

HALF INCH SHANK DRILLS

No. 112 - CARBON — No. 412 HI-SPEED



Diam. Ins.	List Price Carbon Each	List Price Hi-Speed Each	Diam. Ins.	List Price Carbon Each	List Price Hi-Speed Each
1/8	$ .61	$1.60	19/32	$1.62	$4.75
5/32	.61	1.72	5/8	1.75	5.03
3/16	.67	1.78	21/32	1.89	5.31
7/32	.74	1.96	11/16	2.02	5.68
1/4	.78	2.12	23/32	2.15	5.87
9/32	.88	2.28	3/4	2.20	6.14
5/16	.94	2.45	25/32	2.43	6.43
11/32	1.01	2.62	13/16	2.57	6.70
3/8	1.07	2.79	27/32	2.70	6.99
13/32	1.14	3.08	7/8	2.81	7.26
7/16	1.22	3.35	29/32	2.97	7.65
15/32	1.28	3.64	15/16	3.10	8.12
1/2	1.35	3.91	31/32	3.25	8.67
17/32	1.41	4.19	1	3.38	9.50
9/16	1.48	4.47			

ROUND STRAIGHT SHANK DRILLS

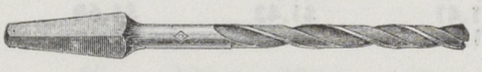
No. 105 - CARBON — No. 405 - HI-SPEED



Diam. Ins.	List Price Carbon Per Doz.	List Price Hi-Speed Per Doz.	Diam. Ins.	List Price Carbon Per Doz.	List Price Hi-Speed Per Doz.
1/64	$3.04	$5.35	17/64	4.96	9.46
1/32	3.04	4.42	9/32	5.38	10.40
3/64	2.31	3.02	19/64	5.68	11.34
1/16	2.39	3.02	5/16	6.07	12.28
5/64	2.47	3.15	21/64	6.65	13.55
3/32	2.55	3.47	11/32	7.15	14.72
7/64	2.60	4.05	23/64	7.80	16.08
1/8	2.69	4.63	3/8	8.50	17.34
9/64	2.76	4.92	25/64	9.21	18.91
5/32	2.84	5.23	13/32	9.41	20.78
11/64	2.99	5.68	27/64	10.98	22.07
3/16	3.36	6.11	7/16	12.05	23.64
13/64	3.74	6.87	29/64	13.10	24.88
7/32	4.10	7.50	15/32	14.17	26.79
15/64	4.24	7.96	31/64	14.58	28.64
1/4	4.60	8.51	1/2	17.00	30.57

No. 108 BIT STOCK DRILLS

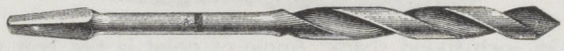
CARBON STEEL



Diam. Ins.	List Price Each	Diam. Ins.	List Price Each
1/8	$ .35	17/32	1.25
5/32	.35	9/16	1.35
3/16	.35	19/32	1.47
7/32	.39	5/8	1.57
1/4	.43	21/32	1.78
9/32	.52	11/16	1.84
5/16	.61	23/32	1.97
11/32	.70	3/4	2.10
3/8	.74	13/16	2.36
13/32	.81	7/8	2.54
7/16	.93	15/16	2.89
15/32	1.03	1	3.12
1/2	1.13		

No. 109A WOOD-BORING BRACE DRILLS

CARBON STEEL



Diam. Ins.	List Price Each	Diam. Ins.	List Price Each
1/8	$ .47	7/16	$1.14
5/32	.50	15/32	1.25
3/16	.57	1/2	1.36
7/32	.65	9/16	1.56
1/4	.72	5/8	1.79
9/32	.79	11/16	2.07
5/16	.86	3/4	2.32
11/32	.93	7/8	3.00
3/8	1.00	1	3.86
13/32	1.08		

TWIST DRILLS

Set No. 1—Set of 9 Drills

Consists of one each of the following: 1/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 11/64", 3/16".

Size of hardwood box containing 9 drills—3¾"x2"x½".

List Price. Per Set..... **$ .71**

Set No. 2—Set of 10 Drills

Consists of one each of the following: 3/32", 7/64", 1/8", 9/64", 5/32", 11/64", 3/16", 13/64", 7/32", 1/4".

Size of hardwood box containing 10 drills—4"x3"x½".

List Price. Per Set..... **$ .87**

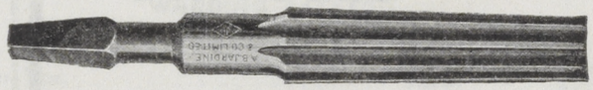
Set No. 3—Set of 7 Drills

Consists of one each of the following: 1/16", 3/32", 1/8", 5/32", 3/16", 7/32", 1/4".

Size of hardwood box containing 7 drills—4"x2"x½".

List Price. Per Set..... **$ .71**

TAPER REAMERS



For working in either hardwood or iron.

Size, Inches	1/4	5/16	3/8	7/16
List, Each	**$1.52**	**$1.52**	**$1.65**	**$1.78**

Size, Inches	1/2	9/16	5/8	3/4	7/8	1
List, Each	**$1.89**	**$2.62**	**$2.40**	**$3.17**	**$4.43**	**$5.70**

STRAIGHT SHANK DRILL SETS

Compact - Convenient - Durable

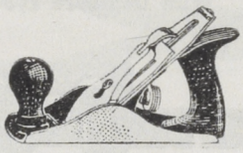
These sets are contained in a handy, durable Cadmium steel plated, indexed cabinet; holes in panels are individually drilled drill sizes and decimal equivalents and tap sizes are plainly marked on panels.

	List Price Each
No. 20 Carbon Steel. 1/16 to 1/4 inch by 64ths	**$ 4.87**
No. 42 Carbon Steel. 1/16 to 3/8 by 64ths	**11.20**
No. 22 Carbon Steel. 1/16 to 1/2 by 64ths	**21.79**
No. 44 Carbon Steel. 1/16 to 1/2 by 32nds	**12.00**
No. 24 Wire Gauge, 1-60	**18.73**
No. 38 Wire Gauge, 61-80	**4.47**
No. 40 A-Z Letter	**26.33**

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

SMALL TOOL SECTION

ADJUSTABLE IRON PLANES



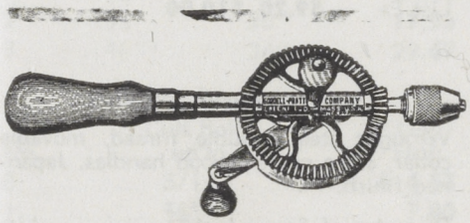
End and side adjustment of cutters. Cutters one solid piece of fine, high carbon steel well ground and polished. Smooth planes are used for finishing flat surfaces.

No.	Length	Cutter	List Ea.
9C	9"	2"	**$10.00**
14C	14"	2"	**10.85**

We also carry a stock of very serviceable but not as highly finished planes as the above.

No.	Length	Cutter	List Ea.
900	9"	2"	**$4.80**
814	14"	2"	**6.10**

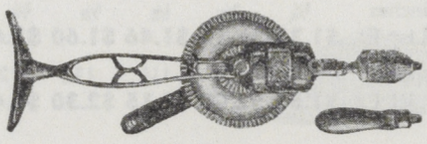
HAND DRILL



The addition of a new idler pinion makes this drill an even greater value. Solid large gear finished in red enamel. Three-jawed steel chuck with protected spring holds 0 to ¼" round shank drills. Steel pinions. Length 12½ inches.

List Ea. **$4.20**

BREAST DRILL



A sturdy two speed drill built on a black enamelled frame. Equipped with a Master chuck holding round shank drills ⅛" to ½" in diameter.

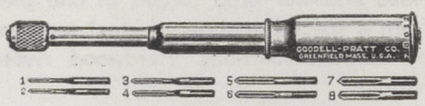
No.	Length	List Ea.
12	17½"	**$11.93**

BREAST DRILL

A fine value in the medium price field. Two speeds with ratios of 3 to 1 and 1 to 1.

120B—Length 16½". List Each **$9.13**

AUTOMATIC DRILL FOR WOOD ONLY

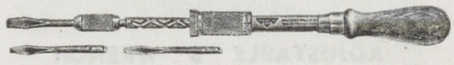


Bores in hard or soft wood without splitting. Pushing handle down revolves the drill. A spring pushes handle back into place. The magazine handle contains 8 drill points 1/16 to 11/64 inch.

188A ..... 9⅝" **$3.33**

Extra Drills for No. 188A. Per Set **$1.47**

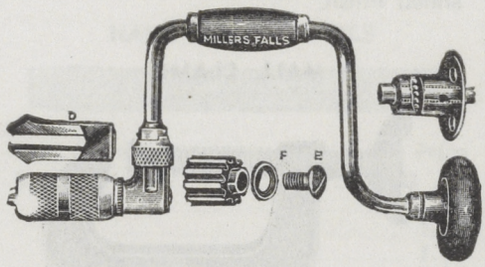
SPIRAL RATCHET SCREW DRIVER



Right or left hand ratchet movement also a device for making it a rigid screw driver. Complete with 3 blades. Length extended with bit inserted 20½". Length closed 14½".

No. 61A. List Ea. **$6.39**

HOLD-ALL RATCHET



All steel nickel plated and highly polished, wood parts cocobolo, dust-proof ball-bearing head. Handle is non-splitting and free acting with adjustable bearings. Ring ratchet is dust protected, forged steel master jaws holding round shank bits from ⅛ to ½ inch in diameter. No. 1 Morse taper and all sizes of bit stock shanks.

Nos.	730	731	732
Sweep Ins.	14"	12"	10"
List Ea.	**$11.40**	**$10.55**	**$10.25**

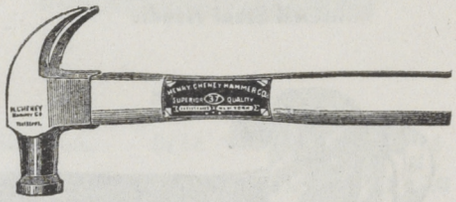
Extra Jaws. Per Pair **$1.27**

A good utility ratchet, will give you good service and do a workmanlike job.

Sweep Ins. ..... 10" List Ea. **$5.30**

Common Brace Jaws. Per Pair **59c**

NAIL HAMMERS



High grade drop forged steel. Bell face adze eye. Polished head, claw and face. Painted neck. Plain polished handle.

No.	Weight	List Ea.
64	16 ozs.	**$2.00**
65	20 ozs.	**2.27**
61½	16 ozs.	**2.46**

BALL PEIN HAMMERS



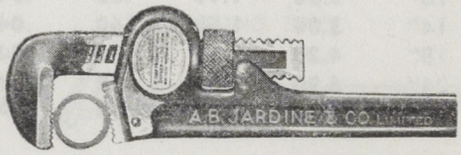
Drop forged ball pein hammers have black head with polished face and pein. Select hickory handle.

Weights including handle.

Lbs.	¼	½	¾	1
List Ea.	**$1.46**	**$1.46**	**$1.51**	**$1.56**

Lbs.	1½	2	2½
List Ea.	**$1.80**	**$2.13**	**$2.33**

STILLSON PIPE WRENCH
All Steel Handle



Bar and Jaw drop forged from a specially selected grade of steel, scientifically heat treated. Will not slip, crush nor lock on pipe. Black rubber finish baked on.

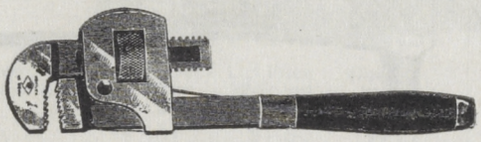
Lgth. Ins.	Cap Pipe	List Ea.
6"	⅛ to ½	**$1.13**
8"	⅛ to ¾	**1.40**
10"	⅛ to 1	**1.73**
14"	¼ to 1½	**2.33**
18"	¼ to 2	**3.33**
24"	¼ to 2½	**5.73**

STILLSON WRENCH REPAIR PARTS

Size Ins.	Frames Each	Jaws Each	Nuts Each
6"	**$ .45**	**$ .65**	**$ .15**
8"	**.55**	**.70**	**.15**
10"	**.70**	**1.10**	**.20**
14"	**.80**	**1.50**	**.30**
18"	**.95**	**2.15**	**.35**
24"	**1.75**	**3.50**	**.55**

SMALL TOOL SECTION

JARDINE RIGID PIPE WRENCH
All Steel Handle



Handle made of "Numal" a new heat treated metal, stronger than steel, unbreakable I Beam construction increases the strength without adding weight. Hook jaws made from special alloy steel, heat treated will not bend or break. Heel jaw heat treated and is renewable, nuts also heat treated.

Straight Pattern Size Ins.	Takes Pipe Ins.	List Each
6"	⅛ to ¾	$ 1.87
8"	⅛ to 1	2.20
10"	⅛ to 1½	2.80
14"	¼ to 2	3.80
18"	¼ to 2½	5.33
24"	¼ to 3	9.33
36"	¼ to 4½	21.99
48"	1 to 6	32.99

JARDINE RIGID PIPE WRENCH
REPAIR PARTS

Size Ins.	Handle Each	Hook Jaw Each	Heel Jaw Each	Pin Each
6"	$ 1.45	$ .65	$ .35	$ .03
8"	1.70	.70	.40	.03
10"	2.30	1.10	.50	.04
14"	3.00	1.50	.60	.04
18"	4.20	2.15	.70	.04
24"	6.90	3.50	.80	.04
36"	13.25	5.70	1.10	.05

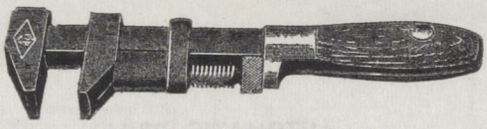
Size Ins.	Coil Spring Each	Flat Spring Each	Nut Each	Straight Handle Assembly Each
6"	$ .03	$ .20	$ .15	$ 1.75
8"	.03	.20	.15	1.95
10"	.03	.20	.20	2.50
14"	.03	.30	.30	3.45
18"	.04	.40	.35	4.95
24"	.04	.50	.55	7.75
36"	.05	.60	1.10	15.00

MAGNESIUM WRENCH 'ARISTOCRAT'

This wrench is the same as the Jardine Rigid Pipe Wrench except that the handle is made of Magnesium alloy, making the wrench much lighter. This is an advantage for overhead work. The comparison of weights as follows:

Size Ins.	Regular	Magnesium	List Ea.
18"	6 lbs. 10 ozs.	3 lbs.	$ 6.20
24"	8 lbs.	4 lbs. 2 ozs.	10.73
36"	16 lbs.	7 lbs. 9 ozs.	22.59
48"	27 lbs. 12 ozs.	13 lbs. 9 ozs.	33.79

MACHINIST'S KNIFE HANDLE



Head and Bar drop forged in one piece from a special analysis of steel tempered by modern methods. Hardwood riveted handle.

Length Ins.	8"	10"	18"
Jaw Open Ins.	1	1⅞	3
List Each	**$1.33**	**$2.00**	**$4.67**

RAILROAD SPECIAL WRENCH

Identical to the Machinist's Knife, except that it is fitted with an indestructible iron handle.

Length Ins.	8"	10"	18"
Jaw Open Ins.	1½	1⅞	3
List Each	**$1.33**	**$2.00**	**$4.67**

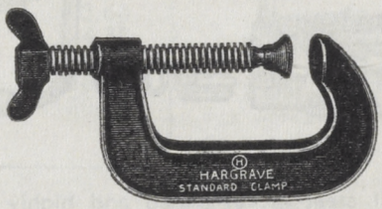
ADJUSTABLE "S" WRENCH

Malleable iron frame, japanned finish, drop forged steel sliding jaw, steel nut. A very convenient wrench on account of its shape.

Length Ins.	12"
Jaw Open Ins.	1⅝
List Each	$2.04

Made of malleable iron, swivel head, japanned finish.

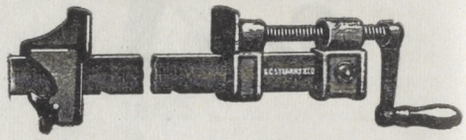
MALL CLAMPS



No.	Opening Inches	Depth from Centre of Screw	List Each
B	2½	1⅞	$2.08
C	3	2 1/16	2.48
D	4	2½	3.11
E	6	2¾	3.73
G	8	3¼	5.65
J	10	3⅝	7.25
K	12	3⅝	8.77

For further information as to small tools and accessories, please turn to automotive section.

STEEL BAR CLAMP
With Improved Eye



Has ⅝x1½ inch steel bar, and ⅝ inch cold rolled steel screw. The double saddle is riveted to the bar at two points. All parts exclusive of screw and bar are malleable iron and are interchangeable. Fitted with crank handle.

No.	2	3	4	5
Open Ft.	2'	3'	4'	5'
List Ea.	$4.33	$4.87	$5.27	$5.80
No.	6	7	8	
Open Ft.	6'	7'	8'	
List Ea.	$6.33	$7.40	$7.93	

AMERICAN STEEL BAR CLAMPS

Similar in design to the above, superior. Made of heavier and better quality steel.

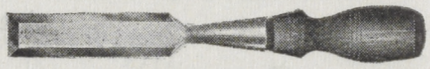
No.	5	6
Open Ft.	5'	6'
List Ea.	$9.20	$10.00

STEEL BENCH SCREWS

Wrought steel, double thread, movable collar, extra quality wood handles. Japanned finish.

Diameter of Screw Inches	1⅛
Length of Overall Inches	14
List Price Each	$1.87

SOCKET FIRMER CHISELS



Crucible steel blades, leather tipped, hickory handle, six inch blades.

Width Blade Inches	¼	⅜	½	⅝	¾
List Ea.	$1.35	$1.37	$1.46	$1.60	$1.65
Inches	1	1¼	1½	1¾	2
List Ea.	$1.85	$2.00	$2.15	$2.30	$2.40

SOCKET CHISEL HANDLES

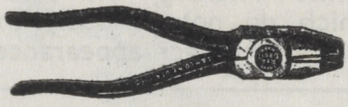


Select hickory, leather tipped. For socket firmer chisels from ¼ to 2 inch.

List Price, Each ..... $ .31

SMALL TOOL SECTION

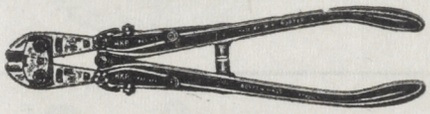
SIDE CUTTING PLIERS



Plain. Polished one side only. Made in England.

No. 3868	List Each
6"	$1.01
8"	1.46

BOLT CLIPPERS



Adjusted by set screws on each side. Capable of very fine adjustment to keep the cutting edges in contact during the life of the jaws. New type of handles which allows for easier cutting. The capacities shown are for annealed bolts only.

No.	Cuts Bolts up to	Length	List Each
0	5/16"	18"	$11.87
1	3/8"	24"	14.40
2	1/2"	30"	17.93
3	5/8"	36"	23.67

EXTRA JAWS

No.	Cuts Bolts up to	List Each
0	5/16"	$ 6.53
1	3/8"	7.80
2	1/2"	10.13
3	5/8"	12.87

PIN PUNCHES

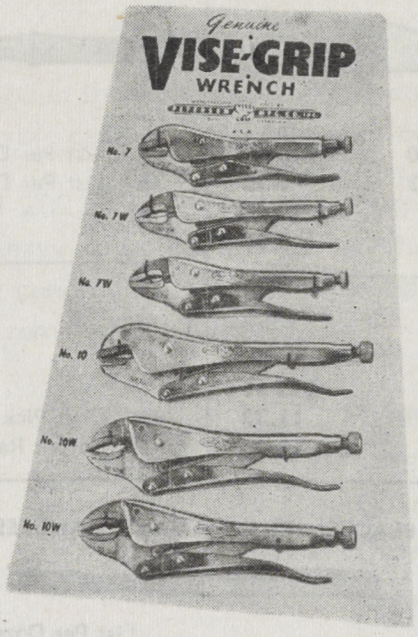


Size, Inches	List Price
3/32x4	$ .84
1/8x4	.80
5/32x4	.80
5/32x6	.86

METAL WORKERS' CRAYONS

Talc pencils. Will mark on any metal surface, wet or dry. Will stand any degree of heat, visible on red hot metal.

Size, Inches	List Per Doz.
1/2"x3/16"x4"	$ .40



VISE GRIP is the original toggle wrench, the leader in its field. Locks to the work with more than ton grip or adjusts to powerful pliers action. Does difficult jobs with amazing ease.

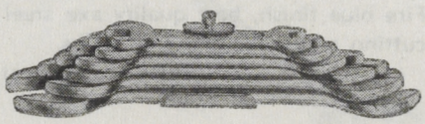
	List Each
No. 7 Standard	$2.45
No. 7W with Cutter	3.40
No. 10 Standard	2.85
No. 10W with Cutter	3.75

HAND COLD CHISELS



Size, Inches	List Price
5/16x5	$ .85
3/8x5	.85
1/2x6	1.00
5/8x6	1.11
3/4x7	1.65
7/8x8	2.29

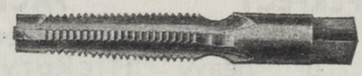
WRENCH SET



No. 2000. 6 piece Cadmium plated. Contains one each of the following:

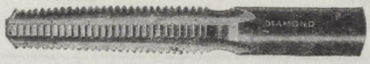
Openings Milled	U.S. Std. Bolt	Hex Cap. Bolt	S.A.E. Bolt
3/8 - 7/16		3/16 - 1/4	1/4
1/2 - 9/16	1/4	5/16 - 3/8	5/16 - 3/8
19/32 - 11/16	5/16 - 3/8		
5/8 - 3/4		7/16 - 1/2	7/16 - 1/2
25/32 - 7/8	7/16 - 1/2	5/8	9/16
15/16 - 1		3/4	5/8 - 11/16

List Price Per Set of 6 ..... $2.67



HAND TAPS

Size, Ins.	5/16	3/8	7/16
List Each	$1.00	$1.13	$1.20
Size, Ins.	1/2	9/16	5/8
List Each	1.33	1.40	1.60



MACHINE TAPS

Size, Ins.	5/16	3/8	7/16
List Each	$1.33	$1.33	$1.33
Size, Ins.	1/2	9/16	5/8
List Each	1.33	1.40	1.60

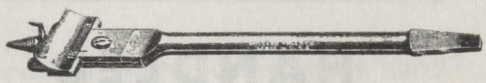
PIKE'S FARRIER KNIFE STONE



List Each

Length, 8 1/4 inches; Width 1 inch $ .55

EXPANDING BITS



No.	Size	List Each
20	5/8" to 1 3/4"	$4.03
10	7/8" to 3"	4.81

EXTRA CUTTERS

No.	Size	List Each
1	5/82" to 1 1/8"	$ .58
2	1 1/8" to 1 3/4"	.65
3	7/8" to 1 3/4"	.91
4	1 3/4" to 3"	1.04

On these pages we have listed a small number of tools. If your particular needs are not listed, kindly turn to "AUTOMOTIVE SECTION" of this catalogue, and you will find a complete list of these items, such as calipers, pliers, screw drivers, etc.

TOOL HANDLES

PERFECT
Choice white Hickory of heavy weight.

PACEMAKER
Good selection of white Hickory, medium weight.

PIONEER
White Hickory of good weight, admitting slight blemishes.

PROVINCIAL
White Hickory with defects which do not seriously injure utility or affect appearance.

HICKORY AXE HANDLES



Single Bit. Oval Bent. List Per Dozen.

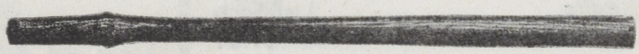
	28"	32"	36"
Perfect	$11.93	$15.20	$15.20
Pacemaker	10.46	13.33	13.33
Pioneer	8.50		10.80
Provincial			8.06

OAK AXE HANDLES

Single Bit. Oval Bent. List Per Dozen.

	36"
Canadian Woodsman	$13.60
Canadian Northman	11.33
Pioneer Oak	8.06

HICKORY SLEDGE HANDLES



	Perfect	Pioneer
32". List Per Dozen	$11.20	$13.86
36". List Per Dozen	7.02	7.82

HICKORY PICK HANDLES

36". Drift Pick Perfect. List Per Doz. $14.96
36". Garant Rail Road. List Per Doz. 17.46

BENCH AXE HANDLES



16" Perfect. List Per Dozen $5.33

BLACKSMITHS' HAMMER HANDLES



List Per Dozen

Length Ins.	14	16	18	20	22	24
Perfect	4.76	4.99	5.67	6.57		
Pioneer	2.72	3.07	3.40	3.97	4.31	4.31

FARRIER'S HAMMER HANDLES



14" Perfect. List Per Dozen $4.99

MACHINISTS' HAMMER HANDLES

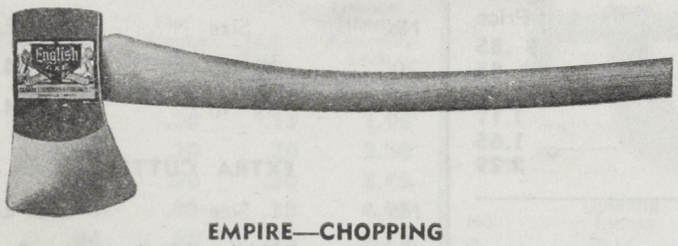
List Per Dozen

Length Ins.	14	16	18	20	22	24
Perfect	4.76	4.99	5.67	6.57		
Pioneer	2.72	3.07	3.40	3.97	4.31	4.41

ADZE HAMMER HANDLES

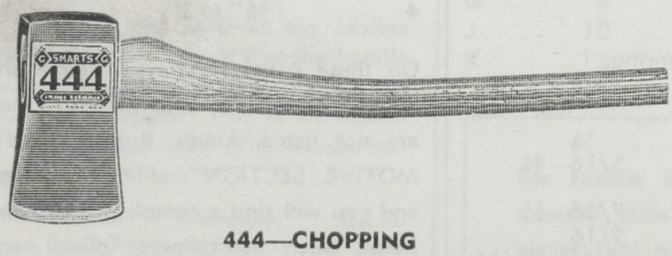
Length 14 inches
Perfect. List Per Doz. $4.76
Pioneer. List Per Doz. 2.72

HANDLED AXES



EMPIRE—CHOPPING

Polished Pole and Bit; painted blue body, high quality steel. 36 inch Maple handle. Weight 3 to 4 lbs.
List Price $2.92



444—CHOPPING

Fire Blue finish, best axe steel tempered to hold a fine cutting edge. 36 inch select Hickory handle. Weight 3 to 4 lbs.
List Price $3.70

EMPIRE—BOYS'

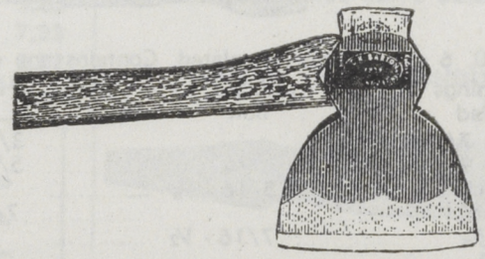
2½ lb. Half polished, balance painted red. 28" hndle painted ivory with red tip.
List Price $2.67

EMPIRE—HUNTERS'

1½ lb. Half polished, balance painted red. 16" handle.
List Price $2.00

BENCH AXES

Fire blue finish, best quality axe steel tempered to hold a fine cutting edge. Weight 3 to 4 lbs.
Price on Application



Three quarter polished head. White hickory handle. The finest Bench Axe that money can buy.
No. 5. List Price, Each $2.73

BLOW TORCHES

Model 92



Model 202



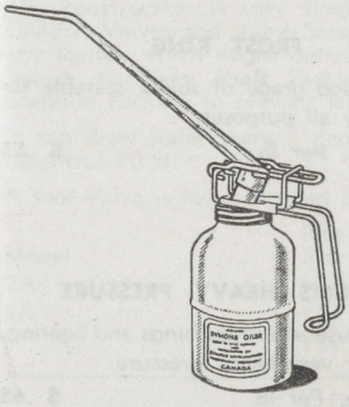
Models 92 and 102 are efficient and economical. Ideal for home use for average jobs such as soldering work. Equipped with a positive shut-off valve, so constructed to prevent enlargement of orifice. Good flame control. Safe, easy to operate.

Model 152 is a dependable general purpose blow torch. Recommended for farm use in the workshop and outdoors. Equipped with cool bakelite wheel, removable gas tip, replaceable self-cleaning needle and slip on windshield.

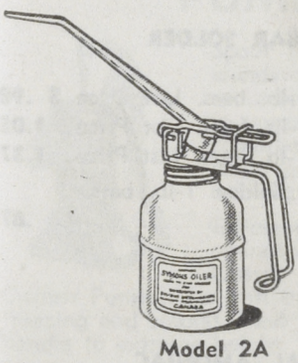
Model 202 is a deluxe heavy duty mechanic's blow and brazing torch. The heavy two-piece burner develops a powerful blast under the most severe conditions. Removable gas tip and replaceable self-cleaning needle. Large removable windshield.

Model	Capacity	List. Ea.
92	Quart	**$ 9.13**
102	Quart	**9.77**
152	Quart	**12.10**
202	Quart	**14.80**

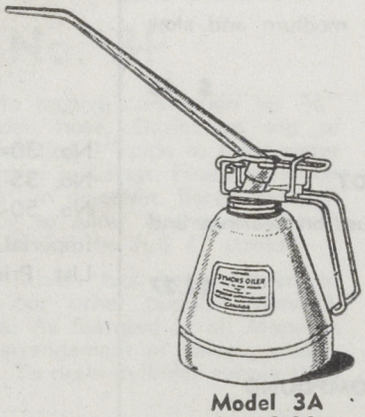
MACHINE OILERS



Model 1A
List 1.60



Model 2A
List 1.87



Model 3A
List 2.33

Scientifically built, no priming; the oil is always at hand.

Perfect control made possible with a comfortable hand fitting grip; the smallest or largest quantity of oil is delivered with equal facility. Made to reach into awkward places.

Practically fool-proof. Has screened intake, spring pressed valve and positive air-tight plungers; all parts interchangeable and replaceable. A Model made to suit every requirement.

Nos.	Capacity	List Price
1A	5/8 pt.	**1.60**
2A	7/8 pt.	**1.87**
3A	1 1/8 pt.	**2.33**

SOLDER SUPPLIES

SOLDERING COPPERS



Without Handles

Octagon or wedge shape, best quality.

Weight Pair Lbs.	¾	1	1½	2
List Per Pair	$ .99	$1.11	$1.51	$1.93

Weight Pair Lbs.	2½	3	4
List Per Pair	$2.37	$2.73	$3.64

MELTING LADLES

Malleable iron, double lipped, one piece with eye in end of handle.

Nos.	7800A	7800B
Dia. Bowl Ins.	3"	4"
Length Handle	12"	12"
List Each	$ .84	$ .93

Nos.	7800C	7800D
Dia. Bowl Ins.	5"	6"
Length Handle	14"	15"
List Each	$1.87	$2.33

BABBIT METAL — GENUINE NICKEL

For very fast running machinery, such as motors, high speed engines and where loads are exceptionally heavy.

List Price, Per lb. $2.19

HI-SPEED

A high quality Babbit used for all-around service and heavy pressure.

List Price, Per lb. ..... $ .55

TRACTION

For many uses, excepting where speed is high and pressure is heavy.

List Price, Per lb. ..... $ .40

MURIATIC ACID

Used as soldering flux on galvanized steel, also will remove stain from brick work.

Size	8-oz.	12-oz.	20-oz.	40-oz.	gal.
L. Pr.	$ .27	$ .33	$ .53	$1.00	$2.08

ALUMINUM SOLDER



Flux filled, making the successful soldering of aluminum a reality.

List Price, Per lb. $4.05

KESTER METAL MENDER

The handy tool-kit package. There's a generous coil in every can.

List Price, Per Carton of 10 ..... $2.40

SOLDERING SALTS

A dry granulated compound specially made for a varied number of metals.

List Price, Per lb. ..... $ .80

KESTER SOLDERING PASTE

Efficient, economical and clean. Positively acid and resin free. Can be diluted with water to suit your work.

List Price, Per lb. $1.25
List Price, Per Carton of 10 ..... 1.73

KESTER RADIO SOLDER

The handy size package of plastic resin-filled solder in flat or ribbon type.

List Price, Per Carton of 10 ..... $2.40

NO. 4

A grade suitable for medium and slow running machinery.

List Price, Per lb. ..... $ .40

HUYOT

The ideal solder for use on bearings and bushings.

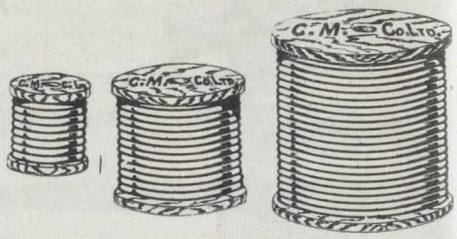
List Price, Per lb. $2.27

TINNING COMPOUND

Cleans and tins metals in one operation. Works easily on dirty or clean metals.

List Price, Per lb. $2.13

PLAIN WIRE SOLDER



1-lb. Spools. List Price, Per lb. $1.48
5-lb. Spools. List Price, Per lb. 1.41

KESTER RESIN CORE

Self-contained flux working on same principle as Acid Core.

1-lb. Spools. List Price $1.69
5-lb. Spools. List Price 1.62

KESTER ACID CORE

Self-fluxing Solder. Supplies flux from tiny pockets while being used.

1-lb. Spools. List Price $1.69
5-lb. Spools. List Price 1.62

FROST KING

A very good grade of solder suitable for practically all purposes.

List Price, Per lb. ..... $ .55

HARRIS HEAVY PRESSURE

Ideal for use where bushings and bearings are under very heavy pressure.

List Price, Per lb. ..... $ .65

BAR SOLDER

No. 30-70. 1-lb. bars. List Price $ .98
No. 35-65. 1-lb. bars. List Price 1.05
No. 50-50. 1-lb. bars. List Price 1.37
Imperial Body Solder. 1-lb. bars. List Price ..... .87

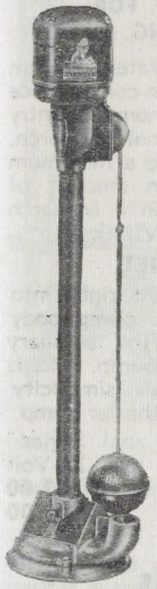
SAL AMONIAC

Specially used for tinning.

List Price, Per lb. ..... .69

MONARCH MACHINERY

SUMP PUMP—Model S.P. 25



The Monarch Sump Pump is used extensively in homes where natural drainage or sewerage connections are too low. When installed in a pit it will keep your cellar bone dry and prevent any excessive rust on your furnace pipes or other automatic heating installations. Another widespread service is in providing drainage for boiler and coal pits, settling basins and many other uses in industrial plants.

The Monarch Sump Pump is automatic in operation. The float control starts motor when pit is full of water and stops it when pit is drained. As sump is submerged at all times no priming or other attention is necessary.

THE COST OF A MONARCH PUMP IS FAR LESS THAN THE DAMAGE CAUSED BY A FLOODED BASEMENT.

Measurements:

Overall Height	44"
Smallest circle Pump will enter	12"
Maximum Depth of Sump	29"
Discharge Pipe	1¼"
H.P. of Motor	¼ H.P.
List Price 1¼" Pipe Size	**$57.50**

MONARCH DOUBLE-ACTING

SEMI-ROTARY SUCTION AND FORCE

The construction is very simple and durable. The Oscillator Divider, Valves and Valve Seats are all solid Brass, eliminating any leather which might deteriorate from contact with various liquids. Oscillator shaft Packing Nut is tightly packed with Graphite Packing to prevent leakage.

It can draw water from a depth of 20 ft. and force it to a height of 90 ft.

A foot Valve is recommended for this Type of Pump.

Model	Pipe Size	Price
2A	1"	**$13.95**
3A	1¼"	**18.50**
5	1½"	**29.50**

CLOSED SPOUT CISTERN PUMP—No. 3F



Spout fitted to receive connection for ¾" standard garden hose. Outlet on top of spout for connecting 1" pipe to force water to upper floors of buildings. Finest cast iron construction 3" in diameter. Bored and polished perfectly to allow leather a smooth working surface for the full 4" stroke.

Efficiency of which has been proven in operation of our other popular Monarch Cistern Pumps. As featured in all Monarch Cistern Pumps. the anti-freeze arrangement of valve prevents freezing and assures fresh water. To drain cylinder simply raise handle to extreme height.

List Price **$7.45**

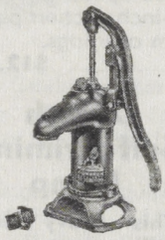
CISTERN PUMP—No. 3



The Valve Seat is rounded and raised to make a perfect contact with the valve. The deep recess around the seat allows scale and dirt to escape and not to be driven into the leather face, which would cause loss of prime. To drain the pump, lift handle to extreme height. This will prevent freezing.

The top is secured to the cylinder with a set screw, and by loosening same, the handle can be set in any desired position. The cylinder is 3 inches in diameter, bored perfectly parallel and is ground to an extra fine finish to assure smooth operation and retain its priming ability.

List Price **$4.75**



BRASS CYLINDER PITCHER SPOUT CISTERN PUMP No. 3B

The housewife's dream of a Cistern Pump for her kitchen. The new 3" seamless brass cylinder adds so much to the appearance and longevity of the pump.

The pitcher type spout is easily kept clean and the top of the pump is fully covered to prevent waste from dropping inside.

List Price **$5.50**



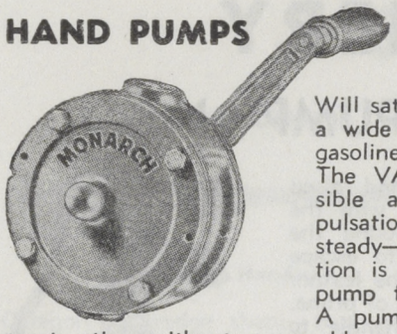
ALL-BRASS FOOT VALVE

STRATAFLO Foot Valves have a one-piece cast red brass body and a helically wound spring wire strainer, self-cleaning and indestructible. Poppets are tough, flexible, abrasion-resisting rubber, taper type, which hold tight without seepage, open easily and operate noiselessly. There are no springs, practically no flow restriction and no loss of head.

SPECIFICATIONS — LIST PRICE

Size Pipe	Length Overall	Enters Pipe Size	Std. for Cold Water No. 200	With Metal Poppet No. 201
¾"	3¾"	1¼"	**$ 2.30**	**$ 2.95**
1"	4½"	2"	**3.15**	**4.00**
1¼"	5¼"	2½"	**4.00**	**4.85**
1½"	5¾"	3"	**5.75**	**7.45**
2"	7"	3½"	**9.20**	**10.35**
2½"	7½"	4"	**13.80**	Not furnished
3"	7"	4"	**14.95**	Not furnished

HAND PUMPS



MONARCH ROTARY VANE TYPE SUCTION AND FORCE

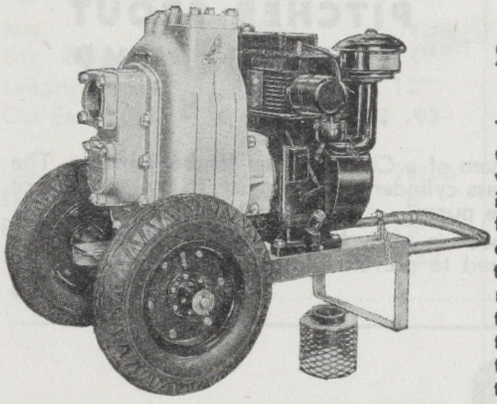
Will satisfactorily handle liquids in a wide range of viscosities, from gasoline to heavy lubricating oils. The VANE Principle makes possible a smooth, even flow—no pulsation. The crank action is steady—no "jerks" and the operation is surprisingly easy. An ideal pump for garages and on farms. A pump of simple and durable construction without any rubber or leather valves or seats which might deteriorate from contact with liquids. A pump that stands up under extreme adverse conditions and delivers a steady stream. Capacity at easy cranking speed from 7-10 G.P.M. Suction and Discharge size ¾" pipe.

Furnished in the following constructions:

Model V-1—Cast Iron Body and Rotor with Brass Vanes.
List Price **$10.00**

Model V-1CIB—Cast Iron Body with Brass Rotor and Vanes.
List Price **$11.75**

Model V-1SP—Pump V-1 with dripless up-tilted Spout. Threaded to fit standard garden hose connection. 40-inch suction pipe. Barrel Nuts fit any 1½ and 2-inch steel drum openings.
List Price **$12.50**



2-inch Self-Priming Pump

This heavy duty utility pump is well adapted for irrigation of truck farms or sewage disposal in small towns. There is not a single partition wall, projection or flat spot in the pump for dirt to lodge.

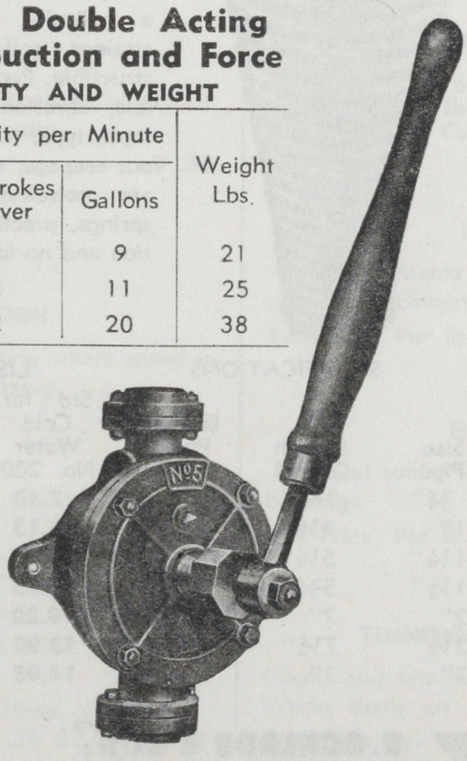
The impeller is of the open type and will handle a large percentage of solids. Conservatively rated at 10,000 gallons per hour and powered by a 4-cycle air-cooled engine this unit is guaranteed to outperform any other pump of this type on the market.

Model 10M-2PW—Monarch 2-inch Self-Priming Pump direct connected to a 4-cycle Gasoline Engine mounted on two Pneumatic tired wheels.
Retail Price, Each **$299.00**

"MONARCH" Double Acting Semi-Rotary Suction and Force

SIZE, CAPACITY AND WEIGHT

No.	For Pipe Size	Capacity per Minute		Weight Lbs.
		Full Strokes of Lever	Gallons	
2A	1"	88	9	21
3A	1¼"	82	11	25
5	1½"	72	20	38

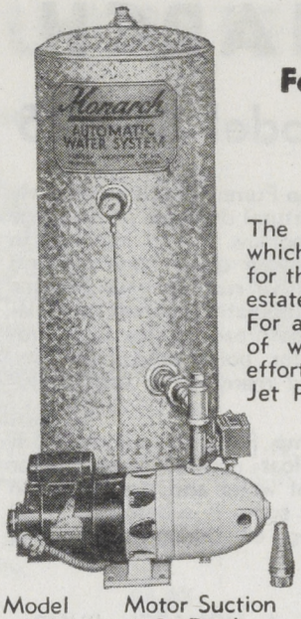


Above Capacities are based upon a full stroke of the lever and on 3 feet suction and 3 feet delivery.

Should the Body or Oscillator require to be replaced, it is necessary to send the complete Pump to our factory.

LIST PRICE

2A **$13.95**
3A **18.50**
5A **29.50**



JET PUMPS For Shallow Wells and Water Systems.

A MODERN PUMP FOR MODERN LIVING

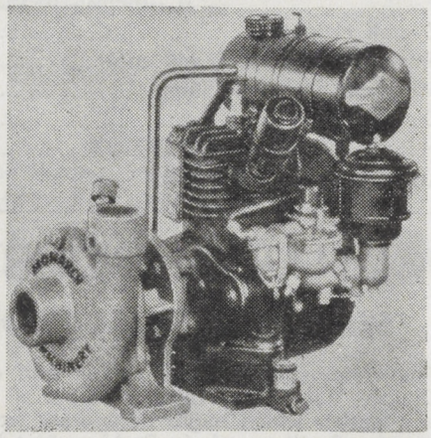
The Ideal All-Purpose Water System which will provide city-water convenience for the farm, the suburban home, country estate, summer cottage, school or church. For a Pump that will provide a maximum of water with a minimum amount of effort and upkeep, insist on a Monarch Jet Pump for MODERN LIVING.

BUILT-IN JET

High efficiency is built right into the pump itself. The pump body completely encloses the auxiliary jetting action of the pump. This is a feature that insures simplicity with the efficiency of the jet pump.

Model No.	Motor H.P.	Suction Discharge	Pressure Switch	Price 110-Volt	Price 32-Volt
SW25	¼	1"	20-40	**$108.00**	**$133.00**
SW33	⅓	1"	20-40	**120.00**	**150.00**
SW50	½	1"	20-40	**132.00**	

E.P. PUMPS

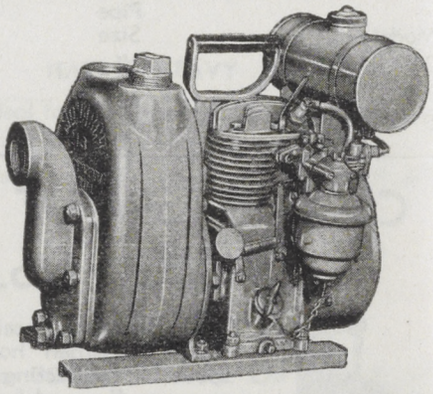


Equipped with Four-Cycle Air-Cooled Gasoline Engines of a nationally known reputation. No Bearings in pumps. The bronze impeller is mounted directly on the Engine Shaft and is of the all enclosed narrow type designed to work up to a 95 Foot Head. A self-adjusting Rotary Seal is used in place of the usual stuffing box. It is positive acting, operates in large Grease Reservoir, keeps water from entering into Engine bearings, and seals pump against all air leaks, so pump never loses its prime when in operation.

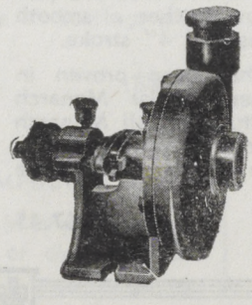
EP-1—1¼" Pump with 1½ H.P. Engine. List Price.... **$110.00**
EP-2—1½" Pump with 2 to 3 H.P. Engine. List Price **175.00**

MODEL 3M 3,000 G.P.H.

Powered with 4-Cycle 1½ H.P. Air-Cooled



Powered with a Four Cycle 1½ H.P. Air-Cooled Engine, complete with Gasoline Filter, Oil Type Air Cleaner, Throttle Speed Control, makes it an ideal Pumping Unit for so many jobs, that they cannot be enumerated herein. The Impeller is mounted direct to the Engine Shaft.
List Price, Each **$128.00**



Centrifugal Pump CP-1

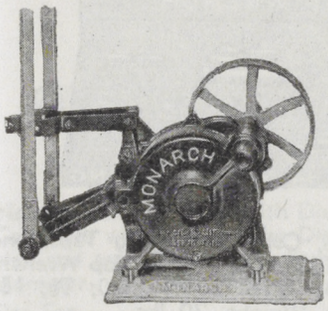
A small dependable side suction Centrifugal Pump for pumping from Lakes, Rivers, shallow Wells, Dugouts, dewatering Boats, Barges, Basements, sprinkling Lawns and Gardens. It is an all round handy pump, yet compact in design, light in weight, yet very efficient.

List Price. Complete with attachment **$32.85**

MONARCH MACHINERY

No. 22 PUMP JACK





A compact, weatherproof, self-oiling and easy running pump jack, mounted on an iron base, with steel clamps to fit any pump barrel. Double gears and pinions as well as other working parts are all enclosed in a heavy case that provides protection from dust and dirt, and assure constant and thorough lubrication. Designed for slow lift and quick return with no dead centres, assures a true vertical lift. Equipped with reversible pulley shaft permitting placing pulleys on either side of jack. Recommended for speed of 40 strokes per minute.

	List Price
No. 22 Jack only with 12" Diameter Pulley	**$37.50**
No. 22 Jack only with 23" Diameter Pulley	**38.75**
Motor-mounting Bracket (not illustrated)	**7.50**

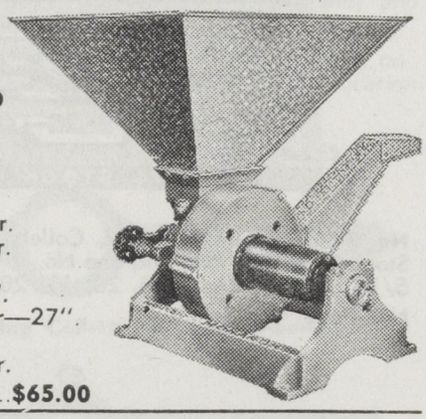
No. 11 PUMP JACK

All enclosed gears, Alemite Lubrication for all working parts, assures a smooth, trouble-free performance for many years. The Pitmans of long sturdy angle iron and the semi-steel Rocker Arms are designed to allow the No. 11 Jack to be used with any make of Stock Pump.

	List Price
No. 11 Jack with 12" Diameter Pulley	**$23.95**
No. 11 Jack with 17" Diameter Pulley	**24.95**

10" GRAIN GRINDER

NO 310 — HIGH SPEED S.K.F. BALL BEARING

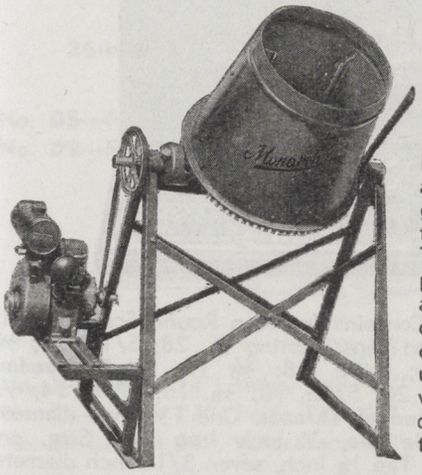


Specifications

Speed Recommended—
2,000 R.P.M. and over.
Power Required—Tractor.
Pulley—4½"x8".
Bagger Pulley—2½"x2".
Height to top of Hopper—27".
Approximate Capacity—
Up to 200 bus. per hr.

List Price **$65.00**

JUNIOR POWER MIXER—No. 10-P



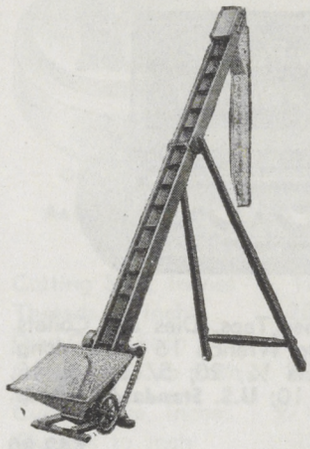
It's Portable.
Easy to Store.
Greater Economy.
Greater Dependability.

Equipped with a powerful air-cooled 1½ H.P. engine with a gear reduction and V-Belt drive. This engine lends itself particularly well to this application, where proper cooling, light weight and dependability are of the utmost importance. All working parts running in oil, enclosed flywheel type magneto.

Rope starter. Standard equipment includes: Oil Bathe Air Cleaner Gasoline Filter, screened Blower Housing and Muffler. Mounted on a sliding base to adjust belt. Engine can be taken from Mixer by removing four bolts, and used for running Cream Separator, Pumps, Grain Elevators and many other rools. Also supplied less motor.

List Price with Motor	**$137.50**
List Price without Motor	**47.00**

PORTABLE WOODEN GRAIN ELEVATOR



FEATURES and SPECIFICATIONS
NEW STYLE HOPPER

Constructed of heavy gauge galvanized sheet metal with angle iron re-inforcements.

Has sloping sides and base to increase flow to grain by gravity. Also has adjustable grain flow regulator.

Constructed low enough for trucks and wagons.

Hopper is situated up over the body of the elevator so that it is not necessary to be raised out of the way.

Elevator

First Grade Lumber used throughout.

Chain is No. 55 Steel with 55 SD. Steel attachment links and flights 1¼x5½x14. Equipped with an efficient chain tightener.

Bearings are equipped with best babbit and have grease cup lubrication.

The efficient flexible spout consists of 5 individual tapered spouts.

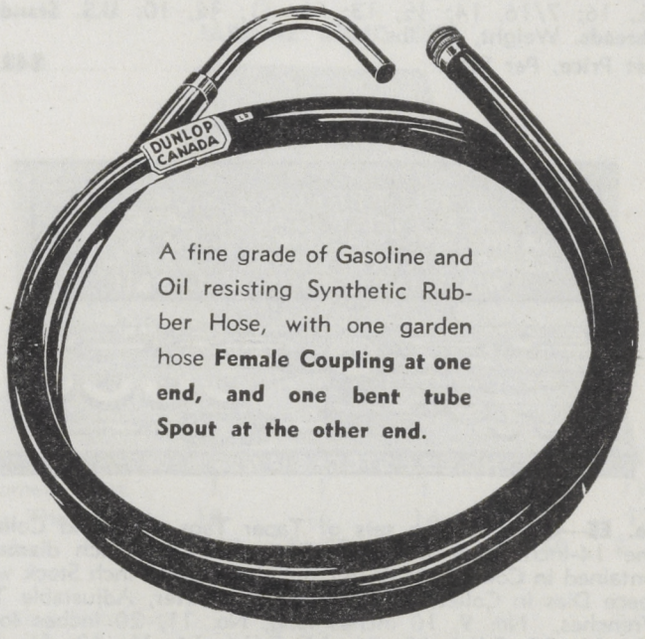
All parts finished in Bright Red Machinery Enamel.

This model requires from 2 to 4 H.P. for most efficient operation. Delivers the grain in the all-enclosed parts of the channels, returning the chain in the upper section.

18-Foot—Elevates Grain about 15 feet. List Price	**$86.50**
20-Foot—Elevates Grain about 17 feet. List Price	**89.50**

Speed Reducer not included — If Required Add $10.00.

"NEOPRENE" GASOLINE HOSE



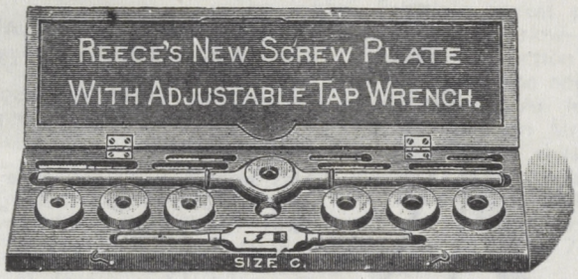
A fine grade of Gasoline and Oil resisting Synthetic Rubber Hose, with one garden hose **Female Coupling at one end, and one bent tube Spout at the other end.**

A Double Braided, Non-Collapsible NEOPRENE Hose. It is strong and flexible—ideal for use on all types of Gasoline Pumps. Will stand exposure to petroleum products, abrasions and weather. You will be amazed at what a work-saver this Hose is. Eliminates many steps and much needless carrying of pails and buckets. Just attach Hose to the Pump and pump directly into tractor or car. Also ideal for draining and siphoning. ¾-inch NEOPRENE Gasoline Tractor Filling Hose 8'4" Long.

List Price **$3.75**

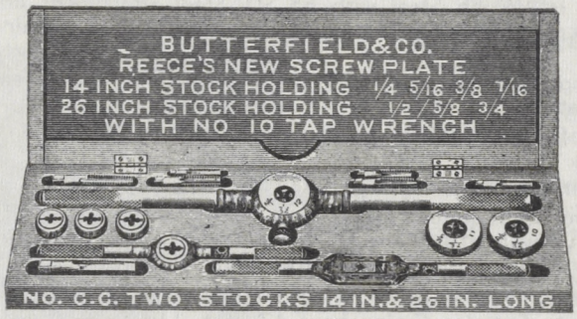
TAPS AND DIES

BUTTERFIELD



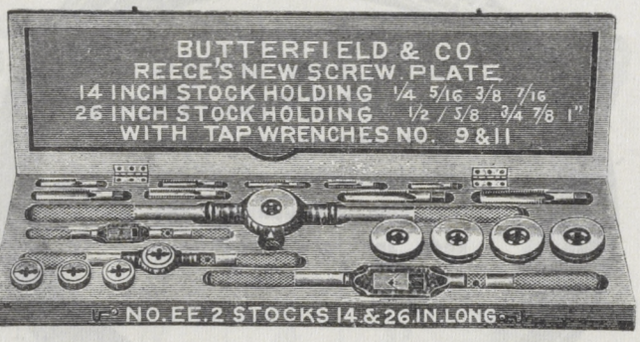
No. C—Contains seven sets of Taper Taps, Dies and Collets. One 26-inch Stock, one No. 10 Tap Wrench 16 inches long. Diameter of Collets 2¾ inches. Cuts ¼, 20; 5/16, 18; ⅜, 16; 7/16, 14; ½, 13; ⅝, 11; ¾, 10; **U.S. Standard Threads.** Weight, 23 lbs.

Net Price, Per Set.....**$42.90**



No. CC—Contains seven sets of Taper Taps, Dies and Collets. One 14-inch Stock with four Derby Dies 1⅝-inch diameter contained in Collets 1⅝-inch diameter. One 26-inch Stock with Reece Dies in Collets 2¾-inch diameter, one Adjustable Tap Wrench No. 10, 16 inches long. Cuts ¼, 20; 5/16, 18; ⅜, 16; 7/16, 14; ½, 13; ⅝, 11; ¾, 10; **U.S. Standard Threads.** Weight, 21 lbs.

Net Price, Per Set.....**$42.90**

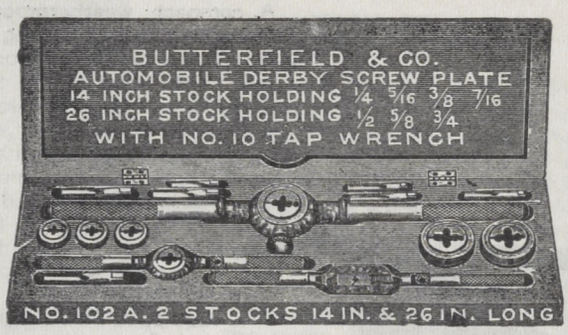


No. EE—Contains nine sets of Taper Taps, Dies and Collets. One 14-inch Stock with four Derby Dies 1⅝-inch diameter contained in Collets 1⅝-inch diameter. One 26-inch Stock with Reece Dies in Collets 2¾ inches in diameter, Adjustable Tap Wrenches, No. 9, 10 inches long, No. 11, 20 inches long. Cuts ¼, 20; 5/16, 18; ⅜, 16; 7/16, 14; ½, 13; ⅝, 11; ¾, 10; ⅞, 9; 1, 8; **U.S. Standard Threads.** Weight, 27 lbs.

Net Price, Per Set.....**$65.50**

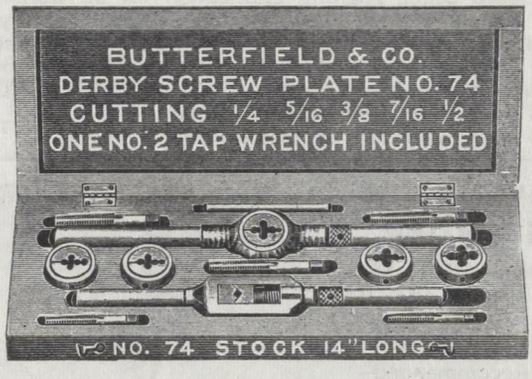
No. E—Contains nine sets of Taper Taps, Dies and Collets. One 26-inch Stock, two Adjustable Tap Wrenches, No. 9, 10 inches long and No. 11, 20 inches long. Diameter of Collets, 2¾ inches. Cuts ¼, 20; 5/16, 18; ⅜, 16; 7/16, 14; ½, 13; ⅝, 11; ¾, 10; ⅞, 9; 1, 8; **U.S. Standard Threads.** Weight, 28 lbs.

Net Price, Per Set.....**$65.50**



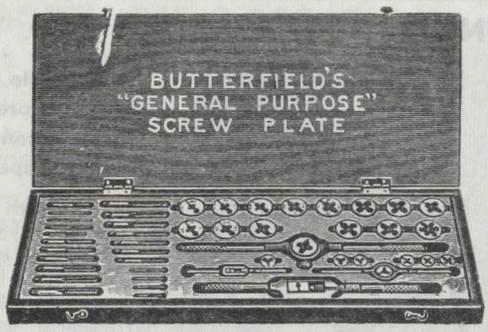
No. 102A—Contains seven Dies, Collets and Plug Taps, one each 14 and 26 inch Derby Stock, and one No. 10 Tap Wrench. Cuts ¼, 28; 5/16, 24; ⅜, 24; 7/16, 20; ½, 20; ⅝, 18; ¾, 16; **S.A.E. Standard Threads.** Weight, 20 lbs.

Net Price, Per Set.....**$42.90**



No. 74—Contains five Dies, Collets and Plug Taps, one Derby Stock 14 inches long and one No. 9 Tap Wrench. Cuts ¼, 28; 5/16, 24; ⅜, 24; 7/16, 20; ½, 20; **S.A.E. Standard Threads.**

Net Price, Per Set.....**$28.85**



No. General Purpose—Contains fourteen Round Screw Adjustable Dies with Plug Hand Taps. Cutting ¼, 28; 5/16, 24; ⅜, 24; 7/16, 20; ½, 20; 9/16, 18; ⅝ 18; **S.A.E. Standard Threads,** 3/16, 24; ¼, 20; 5/16, 18; ⅜, 16; 7/16, 14; ½, 13; 9/16, 12; **U.S. Standard Threads.** One 1½-inch diameter Round Screw Adjustable Die, ⅛-inch Iron Pipe Size, one American Standard Pipe Tap ⅛ inch, seven 3/16-inch diameter Round Screw Adjustable Dies with Machine Screw Taps to match. Cutting 2, 56; 3, 48; 4, 36; 6, 32; 8, 32; 10, 24; 12, 24; **A.S.M.E. Standard.** One each Stocks for above Round Dies. One each Nos. 0 and 2 Adjustable Tap Wrenches. All assembled complete in mahogany finished case. Weight, 13 lbs.

Net Price, Per Set.....**$62.40**

This Set was designed to meet the demand for an assortment of Taps and Dies that will enable every garage to handle any job which may have to be done.

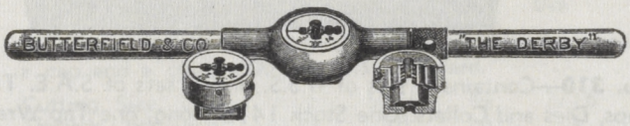
TAPS AND DIES

SET NO. 130A

No. 130A—Contains nine Dies, Collets and Plug Taps, one each 14" and 26" Derby Stock and one each No. 9 and 11 Tap Wrench. Cuts ¼, 28; 5/16, 24; ⅜, 24; 7/16, 20; ½, 20; ⅝, 18; ¾, 16; ⅞, 14; 1, 14; **S.A.E. Standard Threads.**

Per Set **$65.50**

DERBY PUMP STOCK AND DIES



No. 39—Single Stock with Dies cutting ⅜, 14; and 7/16, 12. Complete with guides. The Dies are V Thread, 1/32 inch oversize and are 1-5/16 inch diameter. Guides or Collets, 1⅝ inch diameter.

Per Set.....
Extra Dies..... Prices on Application
Extra Guides.....

DERBY PUMP STOCK AND DIES



No. 108—Double Stock with one Die each, cutting ⅜, 14; and 7/16, 12. Complete with Guides. The Dies are V Thread and are 1/32 inch oversize. Dies are 1-5/16 diameter and do not require Collets.

Per Set..... Prices on
Extra Dies..... Application

STOCKS FOR BUTTERFIELD SCREW PLATES



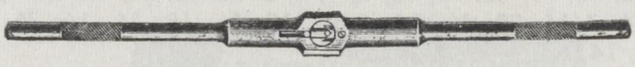
14-in. Stock, Holding Collets 1⅝ Inch Diameter



26-inch Stock Holding Collets 2¾ Inch Diameter
As Used in Sets Nos. C, E, CC, and EE

No. D5—For 1⅝-inch Diameter Collets. Each..... **$4.05**
No. D9—For 2¾-inch Diameter Collets. Each..... **5.65**

ADJUSTABLE TAP WRENCHES



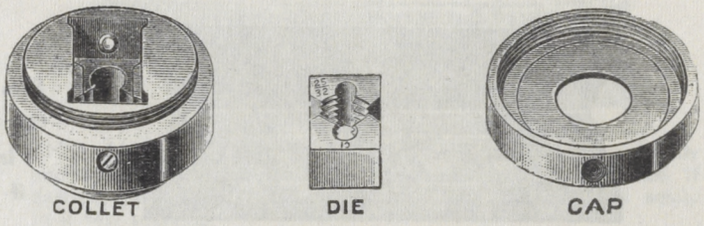
JARDINE

No. 1—Length 14", holds Taps ¼" to ½".
No. 2—Length 17", holds Taps ¼" to ¾". } Prices on Application
No. 3—Length 24", holds Taps ⅜" to 1".

BUTTERFIELD TAP WRENCH

	Each
No. 9—Length 10", holds Taps 3/16" to ½"	**$5.65**
No. 10—Length 15" holds Taps ¼" to ¾"	**6.45**
No. 11—Length 20", holds Taps ⅜" to 1"	**8.05**

BUTTERFIELD'S "REECES", DIES AND COLLETS

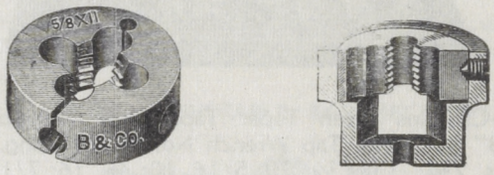


As used in Sets No. C and E and in large Stocks of Sets Nos CC and EE. Threads U.S. Standard.

Cutting Size, Inches	¼	5/16	⅜	7/16	½
Threads to Inch	20	18	16	14	13
Dies Only, Each	**$1.75**	**$1.75**	**$2.15**	**$2.15**	**$2.60**
Collet and Cap Each	**2.25**	**2.25**	**2.25**	**2.25**	**2.25**

Cutting Size, Inches	9/16	⅝	¾	⅞	1
Threads to Inch	12	11	10	9	8
Dies Only, Each	**$2.60**	**$3.00**	**$3.45**	**$4.75**	**$4.75**
Collet and Cap Each	**2.25**	**2.25**	**2.25**	**2.25**	**2.25**

BUTTERFIELD'S "DERBY" DIES AND COLLETS



As used in small Stocks of Sets No. CC and EE Threads U.S. Standard

Cutting Size, Inches	¼	5/16	⅜	7/16	½
Threads to Inch	20	18	16	14	13
Dies Only, Each	**$1.75**	**$1.75**	**$1.75**	**$1.75**	**$1.75**
Collet Only, 1⅝" Dia.	**1.30**	**1.30**	**1.30**	**1.30**	**1.30**

JARDINE SOLID DIES



As used in Jardine Solid Die Sets Threads U.S. Standard

U.S.S. THREAD

Cutting Size, Ins.	5/16	⅜	7/16	½	9/16
Diameter, Ins.	1	1	1	1½	1½
No. Threads	18	16	14	13	12
Each	**$ .50**	**$ .50**	**$ .50**	**$ .50**	**$ .50**

O.S. THREAD

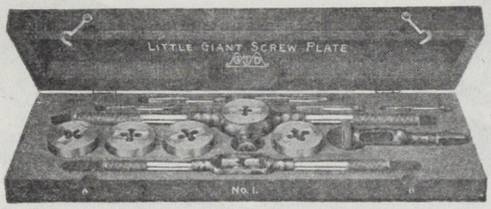
Cutting Size, Ins.	¼	5/16
Diameter, Ins.	1	1
No. Threads	20	18
Each	**$ .50**	**$ .50**

THREAD CUTTING OIL

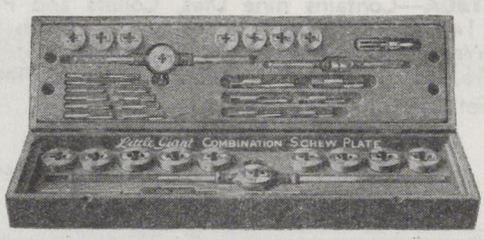
Gallon **$1.20**
½ Gallon ..... **.70**

TAPS AND DIES

"LITTLE GIANT"

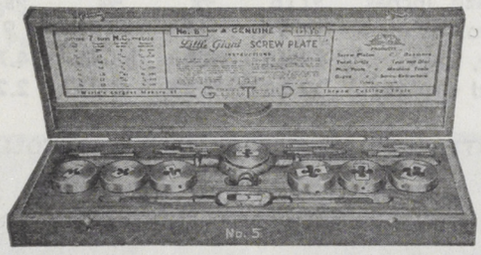


S.A.E. Threads can be supplied in all Sets if specified.



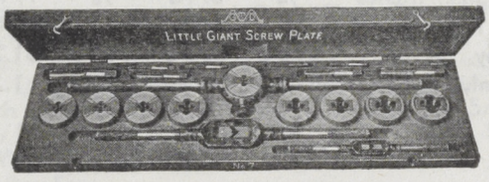
No. 1—Contains five sets of Taper Taps, Dies and Collets. One Stock 14½" long, one Tap Wrench No. 5, 11" long and one Bit Brace Shank. Cuts ¼, 20; 5/16, 18; ⅜, 16; 7/16, 14; ½, 13; **U.S. Standard Thread.** Weight, 2½ lbs.

Net Price, Per Set **$27.55**



No. 5—Contains seven Taper Taps, Dies and Collets. One Stock 23" long, one Tap Wrench No. 6, 15" long. Diameter of Collets, 2¾". Cuts ¼, 20; 5/16, 18; ⅜, 16; 7/16, 14; ½, 13; ⅝, 11; ¾, 10; **U.S. Standard Threads.** Weight, 20 lbs.

Net Price, Per Set **$43.70**

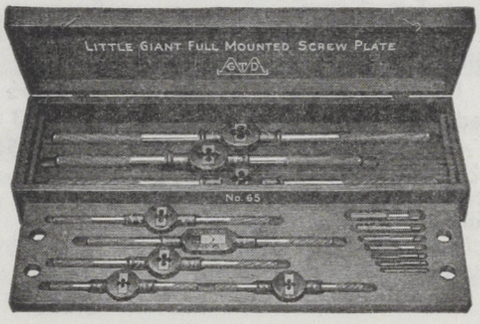


No. 7—Contains nine Taper Taps, Dies and Collets. One Stock 26" long, one No. 5 Tap Wrench 11" long. Diameter of Collets 2¾". Cuts ¼, 20; 5/16, 18; ⅜, 16; 7/16, 14; ½, 13; ⅝, 11; ¾, 10; ⅞, 9; 1, 8; **U.S. Standard Threads.** Weight 27 lbs.

Net Price, Per Set **$65.00**

No. 7½—Contains 10 sets of Taper Taps, Dies and Collets. Indentical to No. 7, with the addition of 9/16, 12.

Net Price, Per Set **$69.70**

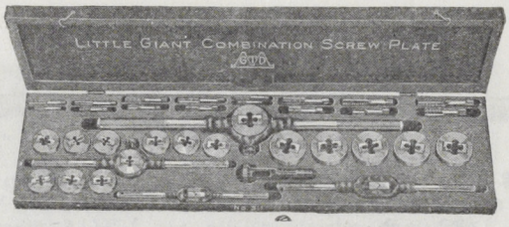


No. 65—Contains seven Taper Taps, Dies and Collets. Each Die and Collet is furnished with Individual Stocks which is a great convenience and time saver. One No. 6 Tap Wrench. 15" long. Cuts ¼, 20; 5/16, 18; ⅜, 16; 7/16, 14; ½, 13; ⅝, 11; ¾, 10; **U.S. Standard Threads.** Weight 24 lbs.

Price on Application.

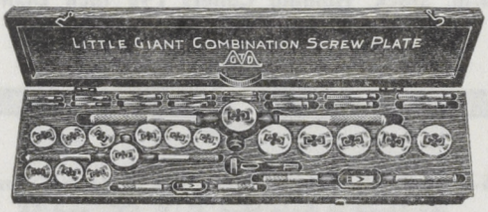
No. 310—Contains 5 sets of U.S.S. and 5 sets of S.A.E. Taper Taps, Dies and Collets. One Stock 14½" long, one Tap Wrench No. 5, 11" long. Cuts U.S.S. ¼, 20; 5/16, 18; ⅜, 16; 7/16, 14; ½, 13; S.A.E. ¼, 28; 5/16, 24; ⅜, 24; 7/16, 20; ½, 20. Diameter of Collets 2".

Net Price, Per Set **$45.75**



No. 311—Contains 8 sets of U.S.S. and 8 sets of S.A.E. Taper Taps, Dies and Collets. Two Stocks, 14½" and 23" long. 2 Tap Wrenches Nos. 5 and 6. Diameter of Collets 2" and 2¾". Cuts U.S.S. ¼, 20; 5/16, 18; ⅜, 16; 7/16, 14; ½, 13; 9/16, 12; ⅝, 11; ¾, 10; S.A.E. ¼, 28; 5/16, 24; ⅜, 24; 7/16, 20; ½, 20; 9/16, 18; ⅝, 18; ¾, 16.

Net Price, Per Set **$83.20**



No. 312—Contains 10 sets of U.S.S. and 10 sets S.A.E. Taper Taps, Dies and Collets. Two Stocks, 14½" and 29" long, 2 Tap Wrenches Nos. 5 and 7. Diameter of Collets 2" and 2¾". Cuts U.S.S. ¼, 20; 5/16, 18; ⅜, 16; 7/16, 14; ½, 13; 9/16, 12; ⅝, 11; ¾, 10; ⅞, 9; 1, 8; S.A.E. ¼, 28; 5/16, 24; ⅜, 24; 7/16, 20; ½, 20; 9/16, 18; ⅝, 18; ¾, 16; ⅞, 14; 1, 14.

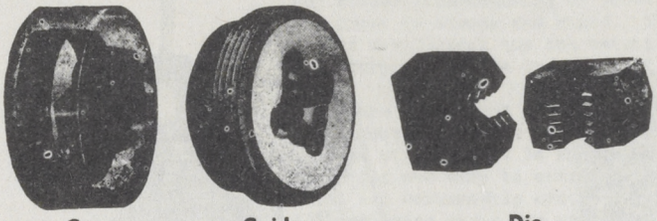
Net Price, Per Set **$120.65**

Additional Information

For additional Tap and Die Sets you may require, we suggest that you write us for further information. The call for larger sets is increasing every day, and although we do not catalogue anything over 1 inch, we are in a position to supply your needs from the factory without any delay.

TAPS AND DIES

LITTLE GIANT DIES AND COLLETS

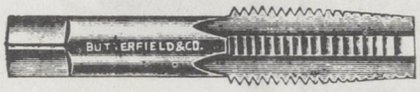


Cap Guide Die

As used in Little Giant Screw Plate Sets. A collet consists of a cap and a guide. **Threads U.S. Standard.**

Cutting Size, Ins.	1/4	5/16	3/8	7/16	1/2
Threads, per Inch	20	18	16	14	13
Die Only. Each	**$1.75**	**$1.75**	**$2.15**	**$2.15**	**$2.60**
Cap & Guide Set	**$2.25**	**$2.25**	**$2.25**	**$2.25**	**$2.25**
Cutting Size, Ins.	9/16	5/8	3/4	7/8	1
Threads per Inch	12	11	10	9	8
Die Only	**$2.60**	**$3.00**	**$3.45**	**$4.75**	**$4.75**
Cap & Guide Set	**$2.25**	**$2.25**	**$2.25**	**$2.25**	**$2.25**

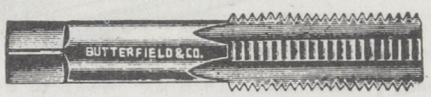
HAND TAPS



Taper



Plug



Bottoming

All orders will be filled with **U.S. Standard Thread** unless otherwise specified. **Left hand** and **all sizes, lengths,** and **threads not listed are special order only.**

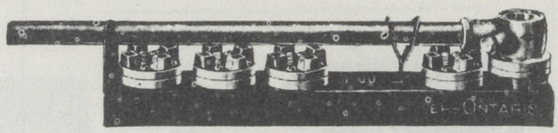
Size, Ins.	No. of Threads to Inch V Standard	U.S. Standard	S.A.E.	Net Each
3/16	24	24		**$ .42**
1/4	20	20	28	**.59**
5/16	18	18	24	**.66**
3/8	16	16	24	**.73**
7/16	14	14	20	**.79**
1/2	12	13	20	**.92**
9/16	12	12	18	**1.06**
5/8	11	11	18	**1.19**
3/4	10	10	16	**1.87**
7/8	9	9		**2.50**
1	8	8		**3.12**
1 1/8	7	7		**4.03**
1 1/4	7	7		**4.48**
1 3/8	6	6		**5.37**
1 1/2	6	6		**6.27**

PIPE TAPS



Size, Ins.	1/8	1/4	3/8	1/2	3/4
No. Threads per Inch	27	18	18	18	14
Net List, Each	**$ .81**	**$ .97**	**$1.30**	**$1.63**	**$2.27**
Size, Ins.	1	1 1/4	1 1/2	2	
No. Threads per Inch	11 1/2	11 1/2	11 1/2	8	
Net List, Each	**$3.56**	**$4.05**	**$5.35**	**$8.10**	

JARDINE NO. 00 RATCHET THREADER



THE "JARDINE" No. 00 RATCHET THREADER is a handy and convenient tool for difficult corners, or at the vise if desired. Separate Die Heads for each size are changed easily in a few seconds.

SEGMENTAL DIE CUTTERS of Special Alloy Steel are easily removed for sharpening or replacement.

DIE HEADS are Special Alloy Die Castings and are designed to provide maximum chip clearance.

RATCHET BODY: Ratchet teeth are undercut and ratchet pawl conforms, making it practically impossible for ratchet to slip, pressure on the ratchet pawl holding it in full engagement at all times.

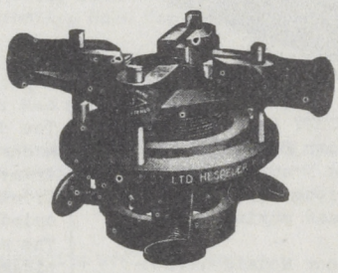
CARRYING CASE: Positive lock on the handle of Threader when in the carrying case is provided. To remove tool press lock springs together and withdraw tool lengthwise.

THE "JARDINE" No. 00 RATCHET THREADER is available in any combination of sizes, for 1/8 in., 1/4 in., 3/8 in., 1/2 in., and 3/4 in. pipe, desired, with or without the Carrying Case.

Net Price

No. 00—1/8 to 3/4 Ratchet Threader with Carrying Case **$24.50**
No. 00—1/4 to 3/4 Ratchet Threader with Carrying Case **20.85**

JARDINE ADJUSTABLE RATCHET TYPE

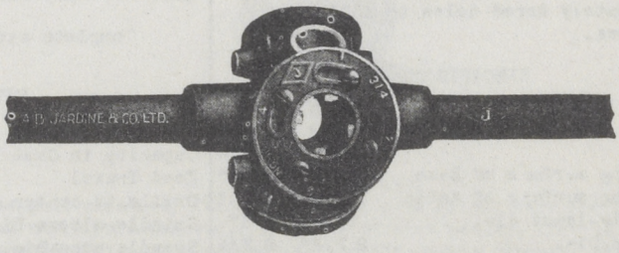


Will cut either Standard Taper or Straight Lock Nut Threads. Ratchet equipped allowing threading to be done in positions close to wall or ceilings. May be used with two handles as an ordinary stock, or with one handle as a ratchet stock. Weight, 20 lbs.

No.	Cuts Threads, Right Hand	Net Each
1A	—1, 1 1/4, 1 1/2, and 2-inch	**$23.00**

ONE DIE THREADING TOOL TYPE

JARDINE THREE-WAY ADJUSTABLE

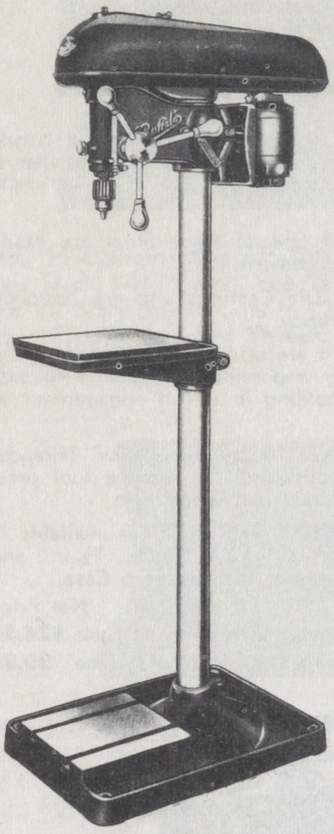


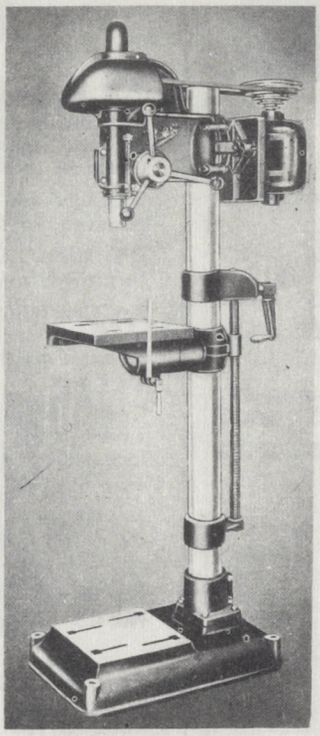
These are the lightest, the smallest, easiest to operate, and all-around most convenient for threading small pipe. The tool body is designed to use segmental dies possessing easy cutting qualities, and are adjustable to suit variations in sizes and fittings. The Die Segments are easily removable and can be reground when dull, or, replaced by new dies at slight cost. Will clear itself of chips and will not clog with cuttings or dirt.

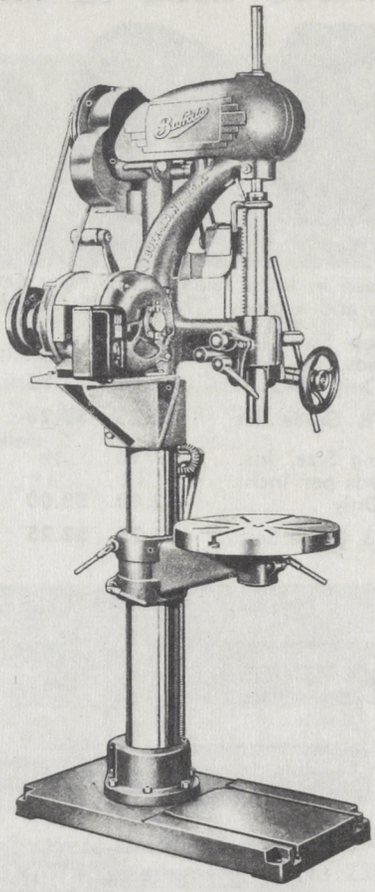
No.	Cuts Threads, Right Hand	Weight	Each
30A	—3/8, 1/2 and 3/4 inch	6 lbs.	**$14.70**
31A	—1/2, 3/4 and 1 inch	7 1/2 lbs.	**17.95**

BUFFALO DRILLS

No. 15 Heavy Duty No. 18 General Purpose No. 21 Back Geared







The No. 15 HEAVY DUTY Production Drill is available in both BENCH and FLOOR Models. This is a Production tool designed to give long life, accurate, speedy operation and maximum facility in operating.

Both Bench and Floor Models have 5 speeds, which meet the average shop's requirements for both high and low speed drilling. When motor bracket is properly set, the belt can be quickly run over from one pair of steps to the next, simply using one hand and without changing bracket adjustment. These pulleys, designed with the correct angles, will carry the full overload of the 1/3 H.P. motor with the belt at this convenient tension.

Table tilts to any angle and has accurately bored holes to locate 0 degrees.

SPECIFICATIONS

Complete with 1/3 H.P. Motor		Net Price Floor 128.50	Bench 116.70
Working surface of Base		10x10"	10x10"
Working surface of table		10x11"	10x11"
Spindle-least dia.		5/8"	5/8"
Column Dia.		2 3/4"	2 3/4
Height-Spindle raised		68"	68"
Max. distance Chuch Nose to Table		41"	11"
Max. distance Chuck Nose to Base		47½"	17"
Feed travel		4"	4"
Capacity in Cast iron		1/2"	1/2"
Motor HP. recommended.			
Spindle Speeds	3450 RPM.	920	1840
	1750 RPM.	460	920
	1450 RPM.	380	760
	1140 RPM.	295	600

The No. 18 Drill is a moderately priced, accurate drilling machine. The head frame is large and heavy and is split in front with adjustment for wear of the spindle sleeve bearing.

The multiple spline spindle is made of nickel alloy steel, ground and polished and is perfectly balanced. The bearings are sealed to prevent the entrance of dust and the loss of lubricant.

The spindle pulley is mounted on precision type ball bearings.

The tables and bases are of extra heavy proportions and have large working surfaces.

The table-raising screw is full ball bearing and is actuated by machine-cut steel screw and machine-cut steel gears. Three ball thrust bearings make for easy operation

Net Price

Complete with ¾ HP. Motor $277.50

SPECIFICATIONS

Capacity in Cast Iron-¾ HP Motor	1"
Feed Travel	5"
Drills to center of circle	18"
Spindle sleeve Dia.	2 3/8"
Spindle nose Dia.	1 7/8"
Working surface of base	11x12"
Working surface of table	12x12"
Distance spindle nose to table	34"
Distance spindle nose to base	50"
Column Dia.	4"
Spindle Dia.	15/16"
Spindle nose-Morse Taper	2
No. 3 Morse Taper nose optional	
Largest Motor Size-HP.	3/4
Speeds with 1140 RPM. motor	460
Speeds with 1725 RPM. motor	670
Speeds with 3450 RPM. motor	1340

This new Buffalo 21" Drill is a powerful well-balanced machine with 8 speeds, 4 feeds, lever and hand wheel feeds. The feed is disengaged by an automatic trip when the drill has reached a predetermined depth. The machine can be changed instantly from direct to back gear drive and both speed and feed drive are V Belt

SPECIFICATIONS

Height of Drill	85"
Capacity, in Cast Iron	1½"
Drills to center of Circle	21"
Distance Spindle Nose to Table	27"
Distance Spindle Nose to Base	40"
Spindle Travel without Depth Stop	12½"
Spindle travels (with 1140 RPM)	
Direct	210-340-510-750
Back Gear	45--70-115-150
Working Surface of Base	16" x 16"
Column Diameter	5½"
Spindle Diameter	1½"
Spindle speeds (tight & loose Pulley drive--300 RPM. on countershaft.	
Direct	52-85-125-185
Back Gear	11-18-27-40
Feeds--per revolution	.003-006-012-018
Morse Taper of Spindle	Std. #4
Dia. Tight & Loose Pulleys	8" x 3"
Recommended Pulley Speed RPM.	300 to 500
Diameter of Table	16½"
Floor Space	35 x 28"

Net Price Complete; $775.00

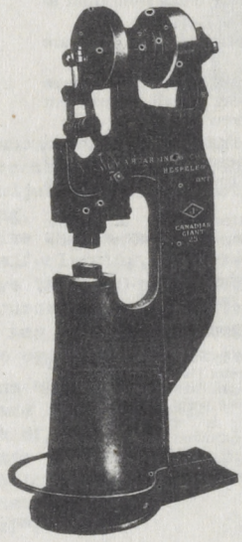
If you do not find the information you require for your particular job, our Salesman will be only too glad to assist you. For illustrated pamphlets showing the Buffalo line of Drills etc. please write,

D. ACKLAND & SONS LTD.
WINNIPEG, MAN.

ALL ORDERS RECEIVE CAREFUL ATTENTION.

MACHINERY and SUPPLIES

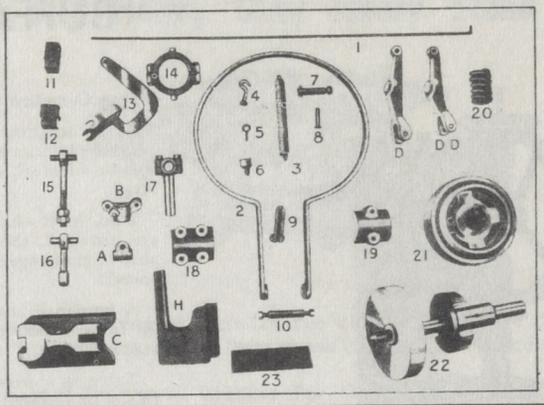
GIANT TRIP HAMMERS



This high grade Power Hammer is suitable for either manufacturing or jobbing.
The frame is strong and rigid. The cone shaped anvil block has the weight necessary to receive the shock of the blow.
There are convenient means for making adjustments necessary for different classes of work. It is simple in construction and easy to operate. Material and workmanship are of the best.
All revolving parts are ground straight and true.
The ram runs in V slides proportioned in length to prevent wearing out of parallel. Provision is made for taking up wear in the slides.
The pitman is of phosphor bronze.
The ram and connections between ram and pitman are either steel forgings or steel castings.
The dies for hammer and anvil are of tool steel. They are held in machined seats by tapered keys, the taper to suit the keys being in the ram and anvil block.
The friction clutch pulley on the crank shaft may be driven in either direction, the belt may be run direct from the line shaft to the friction pulley. No countershaft is necessary
Adjustment is provided for height of ram from anvil to suit difference in thickness of work.
The treadle is adjustable for height from floor to suit the foot.
Every hammer is belted and run before leaving the factory.

	No. 25 lb.	No. 50 lb.
Floor Space Required	17" x 28"	20" x 35"
Height Over All	5'5"	5' 11½"
Size of Upper Die	3" x 1½"	3" x 5⅜"
Size of Lower Die	3" x 2"	3" x 5¾"
Will Forge Stock	2" round	2½" round
Weight of Ram and Hammer Die	30 lbs.	60 lbs.
Size of Pulley	3½" x 10"	5" x 12"
Revolutions per Minute	About 400	About 300
Horsepower Required	1½ H.P.	2½ H.P.
Weight of Machine	800 lbs.	1750 lbs.
Net Price Each	$361.80	$575.00

REPAIR PARTS FOR TRIP HAMMERS



		No. 25	No. 50
1	Treadle Connecting Rod	PRICES ON APPLICATION	
2	Treadle		
3	Treadle Spring		
4	Upper Hook, for Treadle Spring		
5	Lower Hook, for Treadle Spring		
6	Grease Cup		
7	Stud for Friction Clutch Fork		
8	Pivot Pin in Crosshead		
9	Link for Treadle Connecting Rod		
10	Pivot Pin for Treadle		
11	Hammer Die	10.68	22.70
12	Anvil Die	17.35	32.00
13	Friction Clutch Fork	P.O.A.	
13	Friction Clutch Fork	10.00	10.68
14	Friction Clutch Yoke Ring	3.20	4.67
15	Long Connecting Bolt for Ram	4.00	5.34
16	Short Connecting Bolt for Ram	4.00	5.34
17	Pitman	16.00	32.00
18	Front Bearing cover (not babbitted)	P.O.A.	
19	Back Bearing cover (not babbitted)	P.O.A.	
20	Spring for Ram and Pitman	2.75	4.05
21	Pulley	P.O.A.	
22	Shaft, Crank Disc, Friction Sleeve & Crank	P.O.A.	
23	Friction Clutch Pad	1.05	1.60
A	Connection for Lower End of D-D	2.67	4.54
B	Crosshead	5.34	10.68
C	Ram	26.70	64.00
D	Pitman Connecting Rod, left hand	6.66	10.68
D-D	Pitman Connecting Rod, right hand	6.66	10.68
H	Slide cover for Ram	13.35	26.70
	Pivot Pin for lower end of Pitman Rod	P.O.A.	

BLOWERS

CHAMPION ELECTRIC BLOWER



For One Fire

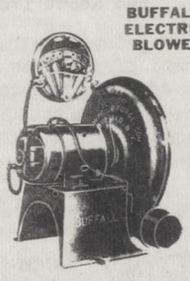
No. 50 Champion one-fire Variable Speed Electric Blower, built for High Pressure Blast and is furnished with Universal Motor wound for both alternating and direct current, either 110 or 220 Volts, and with detached rheostat, with six speeds, which is convenient for setting up the Blower, as the rheostat can be placed wherever desired. The Universal Motor is built with a hammered steel shaft, phosphor bronze bearings self-aligning, commutator of hard drawn copper with twenty-four (24) bars and large flat staggered brushes and silk-covered wire of the best insulation.

No. 50 Complete Net Price. $124.95

WHEN ORDERING SPECIFY VOLTAGE REQUIRED.

		Net Price
Brushes with spring for above	per pair	2.42
Rheostat for above	each	11.30

BUFFALO ELECTRIC BLOWER



No. 2 E Buffalo

Designed primarily for Forge fires: used extensively for blowing small furnaces etc., motor is of such design, that it will operate efficiently and satisfactorily on any circuit, direct or alternating current. Brushes are large and easily accessible through hinged doors.
Ball bearings of radial speed type. Six speed regulator is furnished, giving six variations of blast.

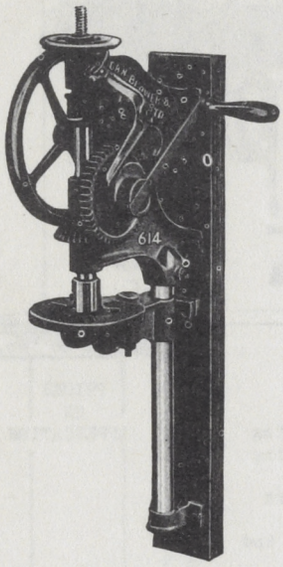
WHEN ORDERING SPECIFY VOLTAGE REQUIRED.

Capacity	R.P.M.	Dia. of Outlet	Height	NET PRICE 110 Volt	220 Volt
1 Fire	2600	3 ins.	15 ins.	78.00	89.15

		Net Price
Replacement Brushes for 2E Blower	per pair	.80
Rheostat for No. 2E Blower 110 Volt	each	11.20

MACHINERY and SUPPLIES

BUFFALO POST DRILLS



Canadian No. 614 Drill

THIS machine has a strong, well ribbed frame with shafts and spindle of steel, carefully turned and fitted.

Two feeds—hand and automatic—are provided, the latter being adjustable to three speeds. Has one spindle speed.

A hardened steel ball bearing takes up friction between spindle and feed screw.

Table is slotted, and can be easily raised or lowered or swung aside, out of the way when desired.

Fitted regularly with Canadian "Improved" chuck.

SPECIFICATIONS

Drills to center of 14" circle; drills holes up to 1¼"; spindle diameter, 1⅛"; run of feed, 3"; run of table, 11"; chuck bored, ½"" length over all, 41"; shipping weight, 96 lbs.

Chuck can also be bored for ⅝ or 41/64 inch straight shank bits, when so ordered.

Canadian No. 616 Ball Bearing Drill

It has two speeds and is back-geared. The speed change is easily and quickly made by shifting the crank from front to rear gear or back.

Two feeds—hand and automatic—are provided.

Automatic feed is adjustable to three speeds by turning small adjustment screw at feed screw head.

End thrust taken up by two hardened steel balls between feed screw and spindle. This reduces friction to a minimum.

A square slotted table, adjustable either up or down or sideways is provided.

Can be furnished with or without tight and loose pulleys.

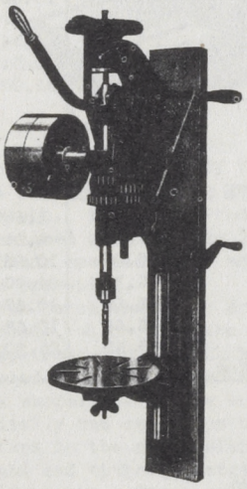
SPECIFICATIONS

Drills to center of 16" circle; drills holes up to 1¼"; spindle diameter 1⅛"; run of feed 3¼"; run of table 10"; length over all 38"; diameter of pulley 6"; shipping weight 125 lbs.

Spindle bored for ½" straight shank bit. On special order, furnished also for ⅝" or 41/64". Also for # 1, 2 and 3 Morse Taper.

NOTE: Can be supplied with tight and loose pulleys.

			Net Price				Net Price
No.	614R	Hand only	$27.80	No.	616	Hand only	$33.20
No.	614A	Hand and Power	32.50	No.	616A	Hand and Power	37.70



No. 800 JARDINE POST DRILLS

SPECIFICATIONS

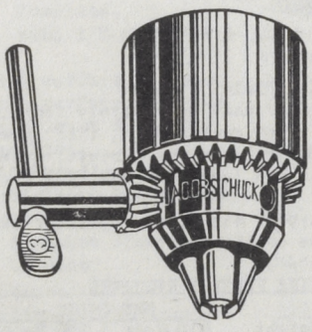
Cut gears throughout.
Driving shaft made long enough for pulleys, for power.
Sure Grip Chuck, on end of spindle, takes drills with 1/2 inch shank only.
Drills must have a flat on shank.
Drills to centre of 21 inch circle.
Run of feed 4 inches.
Run of table on pillar 15 inches.
Greatest distance from spindle to table 15 ins.
Tight and loose pulleys 10" x 2½" face, should run about 170 revolutions per minute.

Patented opening feed nut operated by one motion of a lever.
Hand lever used for countersinking or light drilling, also, to lower drill quickly to work.
Back geared spindle giving two speeds; adjustable square slotted table.
Takes 1/2 inch straight shank bits.

			Net Price
No.	8	Hand only	$108.30
No.	80	Power only (price on application)	
No.	800	Hand and Power	120.00

DRILL CHUCKS

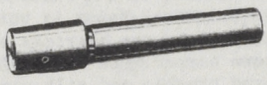
Jacobs Chucks and Arbors



JACOBS KEY CHUCKS are standard equipment on 98% of all portable tools made here and abroad.
Fluted sleeve internally ground on three diameters.
Nickel molybdenum alloy steel jaws expertly heat treated.
Precision bored taper hole in hardened and grounf body--assure maximum strength---accuracy---powerful grip.

No. 3 Diameter of body 2¼"
Capacity 0 to 17/32"
Net Price: $13.65
No. 6A-2A Diam. of body 2"
Capacity 0 to 1/2"
Net Price: $11.40

Jacobs Arbors are the connecting link between the machine spindle and chuck. For maximum accuracy insist on Jacobs Arbors.

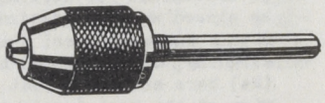


Jacobs Arbors feature a hardened tang which prevents damage by the drift in the knockout process.

Net Price Price 1/2" Shank. $1.40

No. 16 Goodall Pratt

The No. 16 Goodall Pratt 3 Jawed Drill chuck is accurate and convenient for holding small diameter work



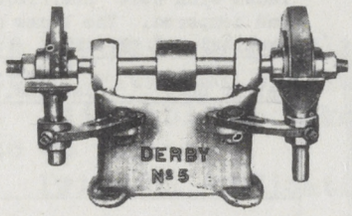
For Straight Shank Drills. 0 to 1/2", complete with 1/2" Arbor.

Net Price: $3.75 Each.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

MACHINERY and SUPPLIES

No. 5 DERBY BENCH GRINDER

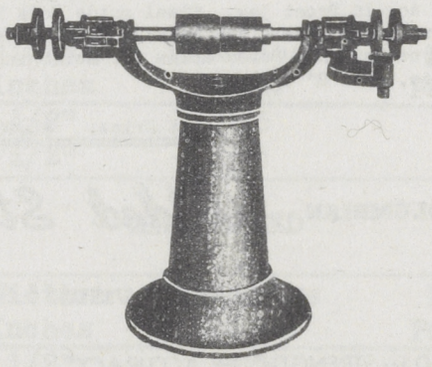


Continuous running at high speed without adjustment and only occasional lubrication.
Fine adjustment of all moving parts, ensuring smooth silent running.
Abrasive wheels wear longer, due to SKF ball bearings, which are self-aligning, have two rings of balls in each bearing, and are the best procurable.
Constructed with a view to save space. The Motor or countershaft may be either installed over or under the grinder, and can be operated from an ordinary lamp socket.

Maximum Wheels recommended	8 x 1 Ins.
Distance between Wheels	11¼ Ins.
Length of Arbor	17¼ Ins.
Diameter of Arbor in Flanges	⅝ Ins.
Height to center of Arbor	6⅛ Ins.
Diameter of Flanges	3⅛ Ins.
Size of Pulley	2½ x 2 Ins.

Net Price Each; $28.95

No. 15a PEDESTAL GRINDER

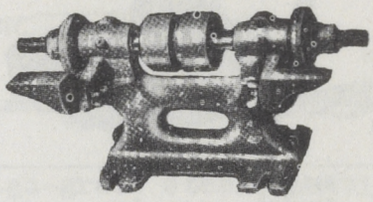


Pedestal Grinder No. 15A has all the fine features of the DERBY No. 5, except, that it is designed and built strong and exceptionally heavy, especially for blacksmiths and other heavy work.

Maximum Wheels recommended	14 x 2 Ins.
Distance between Wheels	33¼ Ins.
Length of Arbor	44 Ins.
Length of Bearings	6⅛ Ins.
Diameter of Arbor in Bearings	1 7/16 Ins.
Diameter of Arbor in Flanges	1¼ Ins.
Diameter of Flanges	5 Ins.
Height to Center of Arbor	30½ Ins.
Size of Pulleys	4½ x 4 Ins.

Net Price: $65.00

No. K-8 Heavy Duty Emery Stand



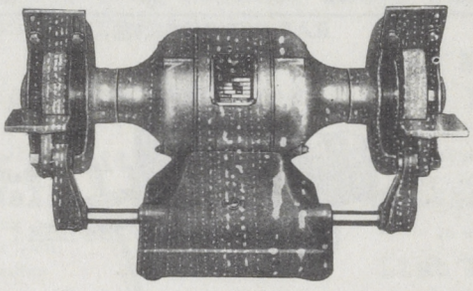
This is a good Universal Grinder for those who wish a Flat or "V" belt type of Grinder. It's capacity for 10" stones

This is a good Universal Grinder for those who wish a Flat or "V" belt type of Grinder. It's capacity for 10" stones lends it's adaptability to Universal Grinding. Especially adapted for smaller shops.

SPECIFICATIONS

Cast Iron construction. Hi-Speed babbit bearings. Zerk fittings for grease gun. Will take 10" stones. Machined cast iron flanges 3" diameter. 15/16 inch shaft reduced to 3/4 inch at ends, 17 inches long. Cast iron combination "V" and Flat pulley 2 3/4" diameter. Net Price: $16.00

No. 76 Heavy Deluxe Grinder



This new line of Bench Grinders incorporates a number of sterling new features that greatly enhance their quick starting and ability to operate under continuous loads.

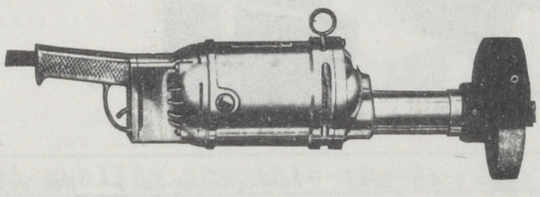
FEATURES

New Super-Powered, Precision balanced motors.
Extra fast capacitor starting with low starting current require ments---less than 15 amperes.
Continuous Induction run for steady, heavy duty service.
New Oversize, labyrinth sealed Ball Bearings.
New Knee action tool rest for straight or angle grinding.
New Enclosed Wheel Guards-- heavier for safety--wider to accomodate wire brush wheels and equipped with standard exhaust connections. All steel guards not supplied with exhaust connections.
Sturdy Construction throughout--heavy chip breakers.
One coarse and one fine wheel regular equipment on each grinder

No. 76---110, 220, 50/60 Cycle. 1/3 H.P. Wheels 6" Diameter.
Net Price: $94.12

Portable Electric Grinders

with Totally Enclosed Motors

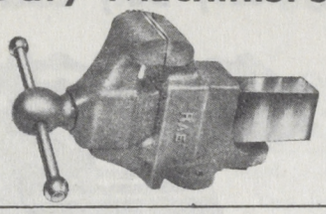


Designed throughout for heavy duty service such as snagging castings, grinding heavy welds, large wire brush work, removing rust, scale and paint, grinding off rivets, pins bolts, etc. Totally enclosed motors exclude injurious dust and grit. One 6 inch x 1 inch wheel regular equipment.
No. 461 is a superior high speed machine with bakelite bonded wheel.
Motors: Universal for D.C. or A.C. 25 to 60 cycle. Voltages: 110,220, and 250. Gears, Pinions and Spindles: Heat treated alloy steel.
Bearings: Oversize ball bearings.
Net Price: $161.04

MACHINERY and SUPPLIES

Heavy Duty Machinist's Vise

Frame is well proportioned, heavily built, **all bearing surfaces machined.**

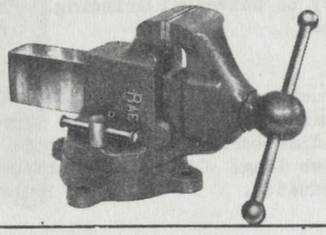


Nut is made of **Maleable Iron,** wear resisting.

Vise No.	Width of Jaw Ins.	Open Ins.	Weight	Net Price
104	4	6	42 lbs.	21.40
104½	4½	6½	53 "	26.60
105	5	7½	72 "	33.40
106	6	10	130 "	65.40

MACHINISTS' SWIVEL BASE VISE

Built for heavy duty work.



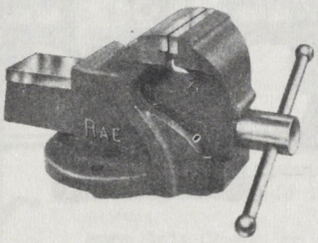
Large range of sizes. All parts interchangeable.

Vise No.	Width of Jaws Ins.	Open Ins.	Weight	Net Price
204½	4½	6½	65 lbs.	33.40

RAE BENCH VISE

Stationary Base

Small cost. Guaranteed strength and rigidity. Range of sizes.



The **Nut,** which is subjected to the most wear, is made of **Malleable Iron.** It is unbreakable under working conditions and will give unlimited service and is replaceable.

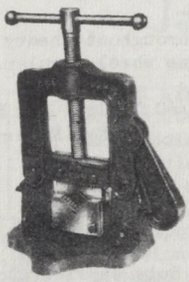
RENEWABLE JAW PLATES

Made of special hardened steel with diamond serrations.

Vise No.	Width of Jaw Ins.	Open Ins.	Weight	Net Price
3	3	3¼	12	5.70
3½	3½	4	21	7.60
4	4	4¾	33	10.20
4½	4½	5½	42	12.75
5	5	6½	53	16.00
6	6	8	72	20.85

RAE SELF LOCKING PIPE VISE

Strong frame is made for Heavy Work.



Hard Wear Resisting Jaws All parts interchangeable at factory.

Vise No.		Holds Pipe Inches	Weight	Net Price
71	(Stock)	1/8" to 2 1/2"	10½	6.90
72	(Import)	1/4" to 3 1/2"	15	9.45
73	(Import)	3/8" to 4 1/2"	24	15.25

Vise Nos. 72 and 73 are not carried in stock. However, thse can be obtained from the factory in a few days.

LEG VISE



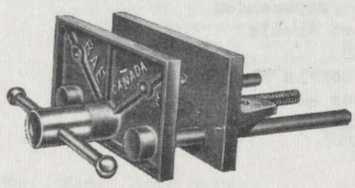
Wrought Iron, with steel screw, and Jaws, faced with best Sheffield Steel, hardened and tempered. The boxes and screws have machined cut threads.

Weight Lbs.	Width of Jaw Ins.	Net Price
35	4	26.15
50	4½	32.15
70	5	41.75
100	6	67.00

The following are not carried in Stock, but can be obtained from the factory within a few days.

		Net Price
150	7	113.50
200	8	160.00

Rae Woodworker's Vise



The "RAE" Woodworkers' Vise is ideal for the homeshop work bench. Heavily constructed, has cast iron jaws with adjustable steel dog in front jaw. Steel guide rods keep the jaws in perfect alignment and machine cut screws insures positive free action. Screw holes for attaching wood faces. 8" x 4" face, with 8" opening.

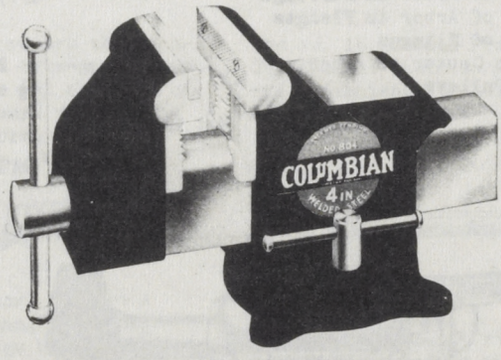
Net Price: $5.00

COLUMBIAN *Welded Steel*

WORKSHOP VISES

ENGINEERED for STRENGTH - for ACCURACY - for LONG LIFE and GREATEST USEFULNESS

Welded Steel Front and Back Jaws
Heat-Treated Steel Jaw Faces—Replaceable
Forged Steel Screw and Handle
Replaceable, Interlocking Pipe Jaws
Steel Swivel Base
Malleable Iron Nut—Replaceable



Vise No.	Jaw Width Ins.	Jaw Opening Ins.	Net Price
804	4	5	$14.10

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

HACK SAWS and BLADES

ADJUSTABLE SWEDISH BOWS

These bows are made of tubular steel with slotted, rivetted brackets at each end. Adjustable to take blades from 36 to 48 inches.
No. 150 Price on Application.

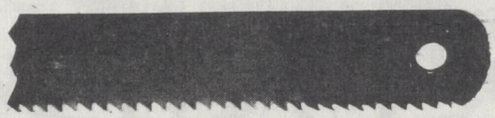
SWEDISH SAW BLADES

No. 409 Four Peg Teeth and a Raker.

Width Inches	Length
1"	42"

Price on Applcation

Hand Hack Saw Blades



CARBON

Length Inches	Width Inches	Thickness Gauge	List Per Doz.
10"	1/2"	.025	1.07
12"	1/2"	.025	1.27

HIGH SPEED

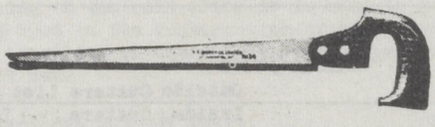
Length Inches	Width Inches	Thickness Gauge	List Per Doz.
10"	1/2"	.025	4.40
12"	1/2"	.025	5.33

POWER HACK SAW BLADES

HIGH SPEED POWER BLADES

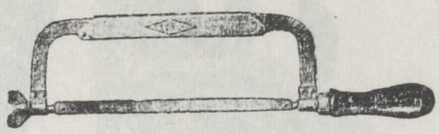
Length Inches	Width Inches	Thickness Gauge	List Each
12"	1"	.049	1.07
14"	1"	.049	1.33

KEYHOLE SAWS



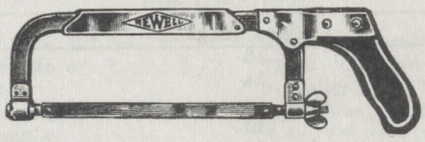
Best quality crucible steel. Has well finished handle with brass screws.
No. 24 12 in. length List ea. 1.35

ADJUSTABLE HACK SAWS



Made of high-grade steel, heavily nickel plated, highly polished. Black Handle. Will hold blades from 8 to 12 inches.

List Each
No. 2B-Complete with Blade .87



Best grade steel nickeled and polished Black Pistol Grip Handle. Holds blades from 8 to 12 inches.

List Each
No. 5B-Complete with Blade 1.47

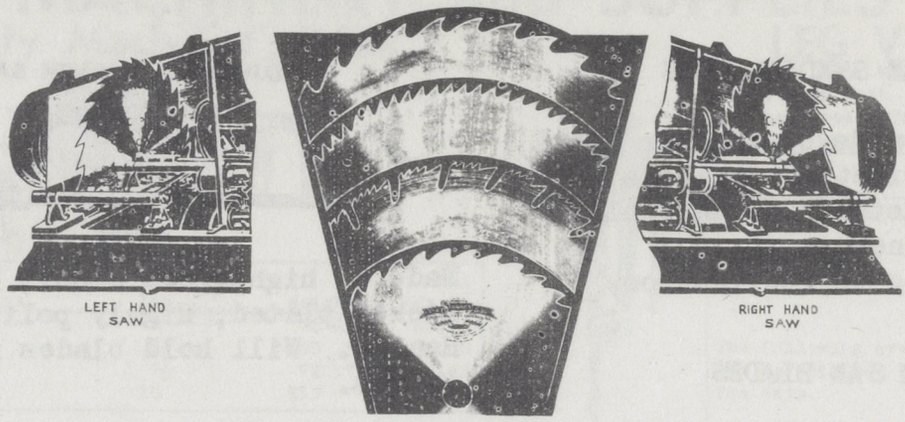
A better quality frame --made by Miller Falls. Pistol Grip. Adjusts 8 to 12 inches.

List Each
No. 48 Complete with Blade 4.00

NEW! NEW! NEW!
ROTATABLE HACK SAW

Unfortunately at time of going to Press, we were not in a position to quote prices or give too many details of this, "BRAND NEW KEYHOLE SAW" We know for sure, that it will, "CUT MOST ANYTHING---MOST ANYWHERE. Steel, iron, wood, plaster, bone, plastics, nails, bolts, metal lath, asbestos, shingles, non-ferrous metals, fibre board, hard rubber etc. are all one to this "REMARKABLE SAW". "IT CUTS THEM ALL" It does all the work of a Hack Saw frame cannot reach and more. The Blade can be faced and positively locked in eight different positions, allowing the operator to always have the handle in the clear for fast work. By the time this Catalogue is in your hands we will be in a position to furnish you with Pamphlets illustrating this WONDER SAW, so please contact us for further information.

SIMONDS
SAWS for MILL and SHOP



LEFT HAND SAW

RIGHT HAND SAW

N.B.—Standing in front of a circular saw (with the saw revolving towards you), if the log passes to the right of the saw it is a Right Hand Saw; if to the left, a Left Hand Saw, as shown above.

STANDARD SOLID TOOTH CIRCULAR CROSS AND RIP SAWS

Diameter Inches	Base Gauge	List Each
12"	15	11.33
14"	14	15.68
16"	14	19.40
18"	13	23.06
20"	13	27.66
22"	12	32.26
24"	11	37.79

Prices on SAWS 26 inches and larger "ON APPLICATION"
All saws filed and set ready for use.

BAND SAW BLADES

Width Ins.	1/4"	3/8"	1/2"	5/8"	3/4"	1"
Gauge	25	25	25	23	23	22
Teeth per Ft.	6	6	5	4	4	3
List per Ft.	.20	.21	.23	.24	.27	.33

PRECISION RED CENTRE SAWS

Diam. Ins.	Thickness Gauge	List Price Cross, Rip and Combination	List Price Hollow Ground Planer saw
6"	18	5.33	7.93
7"	18	7.00	10.80
8"	18	7.00	10.80
10"	18	8.93	13.73

INSERTED TOOTH CIRCULAR SAWS
Styles: B, F, D, 3, 3½, 4 Import Only.

Diam. Ins.	Thickness Gauge	List Each	Diam. Ins.	Thickness Gauge	List Each
36"	8"	146.30	44"	8"	207.08
38"	8"	158.63	46"	8"	227.74
40"	8"	172.56	48"	8"	248.47
42"	8"	189.09			

One extra set points and two extra shanks given with each saw.
One wrench given with each saw or set of saws.

INSERTED SAW TEETH AND SAW TEETH SHANKS

For use with the above styles. It is a good idea to lay in a few spares in case these are needed to finish a rush job.

Inserted Saw Teeth	List each	1.03
Inserted Saw Teeth Shanks	List Each	.93

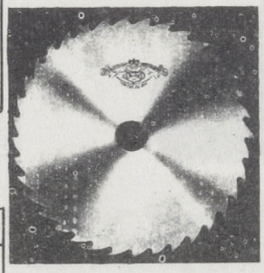
CORDWOOD CIRCULAR SAWS

Diam. Ins	Gauge	Hole Ins.	List Each	Diam. Ins.	Gauge	Hole Ins.	List Each
24"	11	1 3/8"	10.60	30"	10	1 3/8"	16.53
26"	11	1 3/8"	12.40	32"	10	1 3/8"	18.86
28"	10	1 3/8"	14.46				

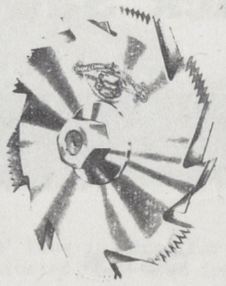
STANDARD HOLLOW GROUND PLANER SAWS

We do not carry a stock of these saws. However, they can be obtained from the factory for immediate shipment. For information as to prices and details, please contact, our Head Office, Winnipeg, or our nearest Branch Office.

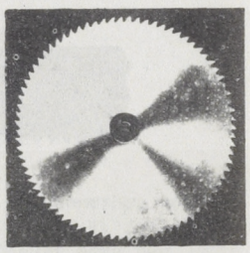
CIRCULAR HOBBY SHOP SAWS
SIMONDS "HOME WOODWORKERS' SAW"



RIP



DADO SET



CROSS CUT

Diam. Ins.	Type	Gauge	Centre Hole Inches	List Each
6	Cross Cut (Cut Off)	18	1/2", 5/8"	3.30
6	Rip	18	1/2", 5/8"	3.30
6	Combination	18	1/2", 5/8"	3.30
6	Planer (Hollow Ground)	19/16	1/2", 5/8"	5.55
7	Cross Cut (Cut Off)	18	1/2", 5/8"	4.40
7	Rip	18	1/2", 5/8"	4.40
7	Combination	18	1/2", 5/8"	4.40
7	Planer (Hollow Ground)	19/16	1/2", 5/8"	7.00
8	Cross Cut (Cut Off)	18	1/2", 5/8", 3/4"	4.40
8	Rip	18	1/2", 5/8", 3/4"	4.40
8	Combination	18	1/2", 5/8", 3/4"	4.40
8	Planer (Hollow Ground)	18/15	1/2", 5/8", 3/4"	7.00
10	Cross Cut (Cut Off)	16	1/2", 5/8", 3/4"	5.60
10	Rip	16	1/2", 5/8", 3/4"	5.60
10	Combination	16	1/2", 5/8", 3/4"	5.60
10	Planer (Hollow Ground)	17/14	1/2", 5/8", 3/4"	9.00

HOME WOODWORKERS" GROOVER OR DADO CUTTER

This new Groover or Dado Set consists of two outside cutters 1/8" thick and four inside cutters as follows: One 1/16" cutter, two 1/8" cutters and one 1/4" cutter.

DIAMETER	CENTRE HOLE	LIST PER SET
6" only	1/2", 5/8", 3/4"	15.75

SINGLE CUTTERS

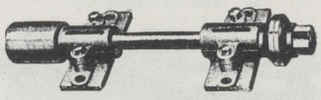
Outside Cutters List ea. 4.95

Diameter	Centre Hole	Inside Cutters	List Each
6" only	1/2"	1/16"	1.05
	5/8"	1/8"	1.50
	3/4"	1/4"	2.10

EVERY ORDER IS A RUSH ORDER WITH US.

MACHINERY and SUPPLIES

SAW MANDRELS

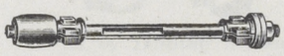


Extra heavy, and fitted with rigid well babbitted Pillow Blocks. The arbors are built of high grade machinery steel, fitted with heavy flanges. Pulleys are crowned and are always shipped on the right hand side when saw is running toward you, with left-hand thread unless otherwise ordered. Pulley can be furnished on left-hand side or on centre if specially ordered.

Diam. & Width of Pulley	Diam. of Flange	Lgth. of Shaft	Diam. of Shaft	Size of Hole in Saw	List Price
5 x 6	5½	34	1 7/16	1 3/8	16.20

Cordwood Saw Mandrels

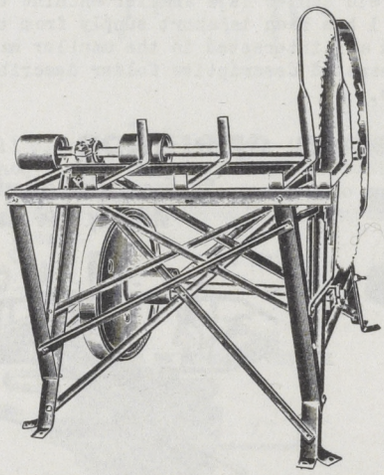
Right or Left



Four feet long with keyways cut on end and middle of shaft: 1 7/16 inch shaft, grooved in boxing to prevent end play. Carefully babbitted bearings, 5½ inch x 1 inch collars, 5 inch x 6 inch crowned pulley. Shipped right hand with saw running toward you unless otherwise ordered

List Price Ea. 13.86

STEEL SAW FRAME



The Improved Unbreakable Frame is constructed of steel throughout. The legs are in one piece of 2" x 2" x 1/8" angle steel with 1" x 1" x 1/8" cross braces.
The New Tilting Table Frame is of 1½" x 1½" x 1/8" angle steel in one solid piece, with ¼" x 1½" flat steel cross pieces securely riveted.
The Shafting is of high grade cold rolled steel 1 7/16" diameter, with keyways for pulleys and balance wheels, and is grooved to eliminate "end play". Takes Saw-Blade with 1 3/8" hole.
Safety Guards--The Saw Guard is of 1/4" x 2" steel, and can be readily adjusted to fit saws of from 24 inches to 30 inches, diameter.
The Table Guard is of 1/4" x 1 1/2" steel
Flanges--Extra heavy. 5½" diameter.

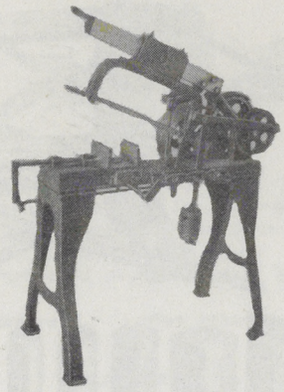
Pulleys--Select "A" Grade. 5" diameter by 6" face.
All castings are of Select "A" Grade gray iron and the bearings carefully babbitted.
The belt can be tightened by a simple adjustment of the countershaft bearings, rendering unnecessary any cutting and re-lacing of the belt after it is once in position.
Every bolt used in the construction of these frames (with the exception of those in the bearings) is supplied with a lock nut.

List Price---Less Balance Wheel. 41.13

STEEL SAW FRAME LESS MANDREL

List Price: 26.26

No. 2 "Perfect" Power Hack Saw



SPECIFICATIONS

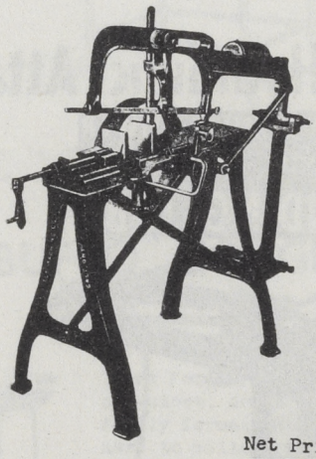
Length of Blade 10" to 12"	Cutting capacity, 6" x 6"
Stroke of Blade 6"	Tight and loose pulleys 10"
Geared 3 to 1	Diameter, 1¾" Face
Swivel Vise adjustable to 45 degree angle	Vise Jaws, 3" high, 4½" wide, 6" opening.
Floor Space, 17 x 36	Net Weight 190 Lbs.

SPECIAL ADVANTAGES

Perfect Machines combine many important features, making them very effective and economical.
The Perfect Power Hack Saw secures more power, because it is driven by MILLED GEARS. A narrower belt can be used and have ample amount of belt surface on driving pulley, which cannot be obtained on a direct driven machine.
Tight and Loose Pulleys which do not get out of order, thus advoiding the trouble which a clutch frequently gives.
Automatic Shut-Off throws belt from tight to loose pulley.
Buckling or breaking of saw is minimized by the Gravity Feed. Weight can be added as Saw becomes dulled.
The Swivel Vise cutting to an angle of 45 degrees is interchangeable, so that a broken Vise can be replaced in a few minutes.

Net Price: $150.00

No. 3 "Perfect" Power Hack Saw

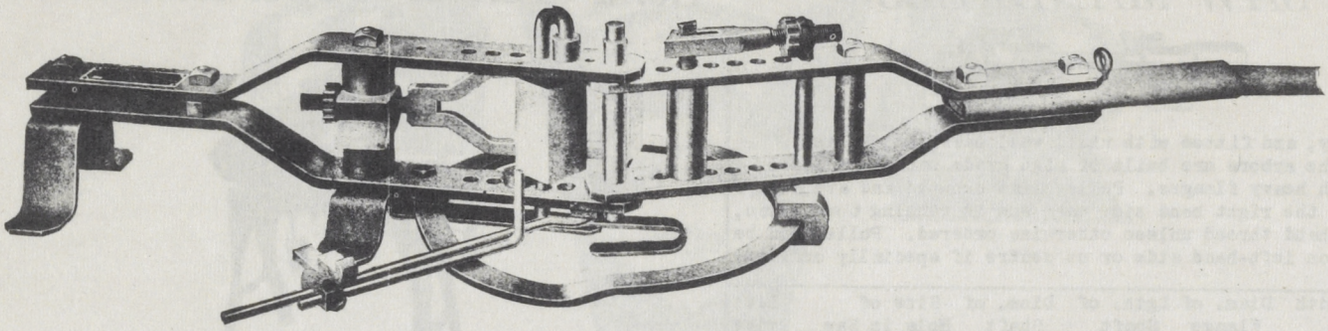


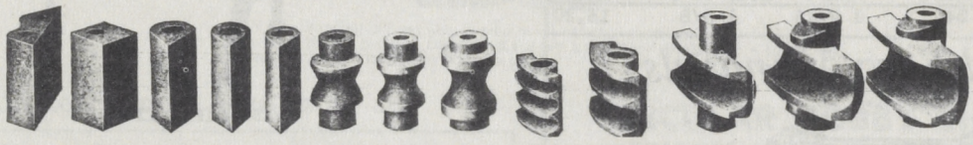
Net Price: $89.40

An Ideal every day Hack Saw, has so few working parts there is really nothing to go wrong.
WILL GIVE YOU QUANTITY AND QUALITY PRODUCTION WITH PRACTICALLY NO ATTENTION.
Cuts bars 6 x 6 round or square. Stops automatically when piece is cut off.
The Swivel Vise cutting to an angle of 45 degrees is interchangeable so that a broken vise can be replaced in a few minutes.
Vise Jaws 3" high, 4¼" wide, with 6" opening.
Special Attention is called to the "Adjustable Arm and Saw

HOSSFELD Universal Pipe, Bar and Angle Iron Bender

Wrenchless Type, Size No. 2





ABOVE ILLUSTRATION SHOWS BENDER AS FURNISHED WITH REGULAR EQUIPMENT

Takes the place of several different special machines, wrenchless, can be adjusted in a moment.

Size no. 2 has a bending capacity of 2" standard pipe cold. On bar stock it has a capacity of $4\frac{1}{2}$" x $\frac{1}{2}$" flat or $1\frac{1}{4}$" round or square cold. For hot bending the capacity is nearly double. Will bend $4\frac{1}{2}$" x $\frac{1}{4}$" at right angles cold, 5/8" round or square eye bolts, or "S" shapes. $1\frac{1}{4}$" round or square "U" shapes. Rings or continuous coils can also be made. For bending ornamental iron work the bender has a capacity of 3" x $\frac{1}{4}$" or 5/8" round or square cold.

	Net Price
Size No. 2 With Regular Equipment	$158.20

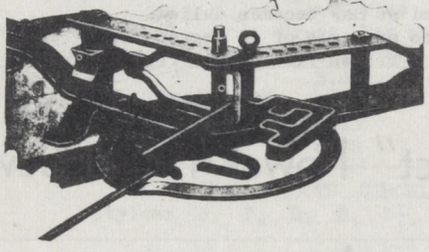
Extra Equipment

Spring Eye Attachment	35.30
Inward Angle Bender	44.90
Outward Angle Bender	52.35

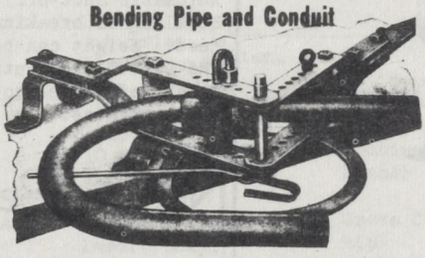
The No. 1 Hossfeld Bender is a smaller machine than the No. 2. Lately the No. 1 has been in short supply from the factory. However, if you are interested in the smaller machine, please write for illustrated descriptive folder describing it's capacities and uses.

Pictures of the Hossfeld Bender in operation

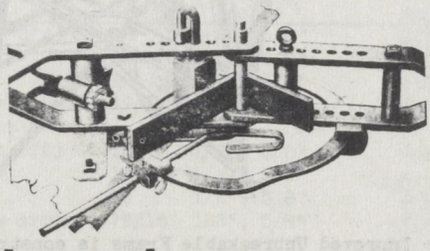
Bending Ornamental Iron Work



Bending Pipe and Conduit

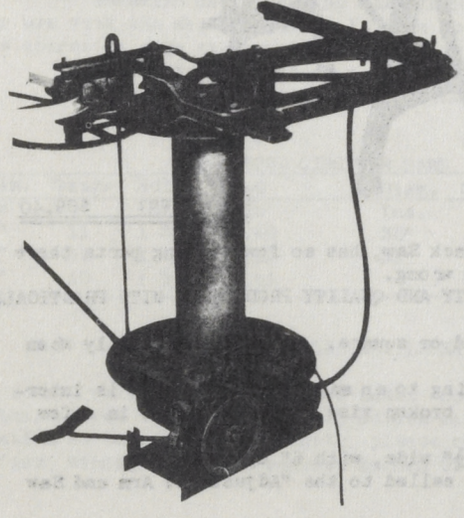


Bending Angles, Offsets, Etc., of Heavy Cold Stock



Hydraulic Attachment for Hossfeld Bender

Now.. HYDRAULIC POWER FOR FASTER.. MORE ACCURATE BENDING JOBS



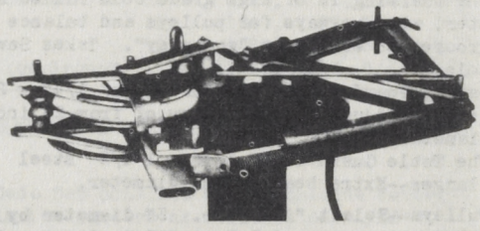
- EASY TO OPERATE
- MAXIMUM POWER
- ECONOMICAL TO USE
- TROUBLE FREE OPERATION

SMOOTH POWER at a touch speeds bending pipe, bar and angle iron on production, maintenance or construction. You save extra hand labor if you are short handed. Or you can get more production capacity and uniformity as a manufacturer of bent iron parts.

The new No. 2 Hossfeld HYDRAULIC Universal Pipe, Bar and Angle Iron Bender is the same basic machine as the hand operated model No. 2 to which has been added the hydraulic unit consisting of motor, pump, cylinder and foot control

Heavy stock, such as 2"x2"x$\frac{7}{16}$" angle iron and 2" pipe can be bent with the same effortless ease as smaller size stock. The hydraulic power applies a smooth steady bending force, not possible by hand. This is important for accurate and uniform bending of the same design in production quantities of hundreds or thousands.

180 Degree RADIUS BENDING for..... RADIANT HEATING COILS



Contractors, who install radiant heating pipes in modern construction, will find this attachment to their Hossfeld Bender indispensable. The Bender is compact and can be set up on a bench or a pedestal of its own, out of the way of construction.

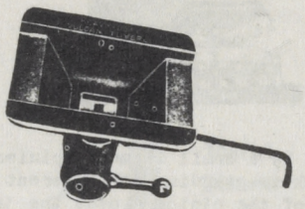
It will bend copper, aluminum and steel tubing into perfect 180 degree bends quickly and uniformly without distorting, wrinkling or flattening the tubing without using an inside mandrel or filler. This attachment will cut installation costs for labor to a minimum and speed up the work to meet building schedules.

Hydraulic Attachment, Motor Included: Net Price:	$630.00
Pedestal Stand for above: Net Price:	76.15

EVERY ORDER IS A RUSH ORDER WITH US.

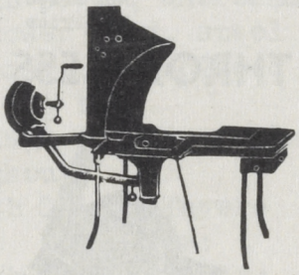
MACHINERY and SUPPLIES

VULCAN TUYERE



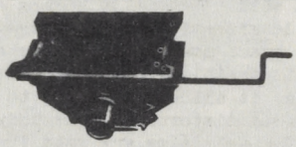
Heavy Cast Fire Pot with adjustable Valve or ball at bottom through which the draft is driven by two converging air channels giving a rapid whirling blast which produces a hot white heat with minimum fuel.
Inside dimensions; 12½ x 14 x 4½ inches.
No. V.T. Net Price. $17.05

No. 10—JARDINE



Suitable for all classes of work up to 4 inch iron. Tuyere is made extra heavy where the fire comes in contact, no danger of burning out. Bottom Pan is lowered to make ample room for a large fire without spreading. Hearth 31 x 44 inches; Fan 12 inches.
No. 10 Net Price. $92.75

FLEWELLING EXTENSION TUYERE



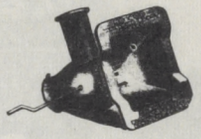
Closed or extended by a right and left hand screw operated by a crank. Can be closed for a small fire the same as an ordinary tuyere, and can be extended to uniformly heat a 12 inch plow share in the same time taken to make a short heat in an ordinary fire.
No. F.E.T. Net Price. $57.00

CLIMAX TUYERE



Cast Iron, natural finish wrought iron rod fitted with revolving clinker breaking valve which insures easy cleaning.
Width overall 8 inches, length, 7 inches, blast pipe 3 inches diameter, height, 10 inches.
No. C.T. Net Price. $7.80

CHAMPION TUYERE



Whirlwind Blast, Anti-Klinker, Heavy Nest. Has revolving pick, to pick the clinkers out of the side slots, keeping the slots open without disturbing the fire from the top. 5 inches deep, 8¾ inches wide, and 10⅛ inches long. 12 3/8 x 14 3/4 inches, overall. Furnished regularly with No. 400 Champion Blower.
No. 400 Champion Tuyere Net Price. $27.22

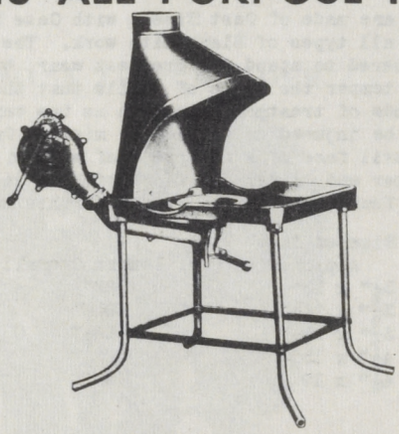
BLAST GATE



Made of Cast Iron, used when two or more fires are connected with one blower. Made specially for Fan and Pressure Blowers.

Outside Diameter: 3 and 4 inches.
Prices on Application.

No. 0728 ALL PURPOSE FORGE



The No. 0728 Forge is of Cast Iron, low price adapted especially to the needs of the farmer and mechanic who desires an up-to-date forge.

Net Price: $49.00

"BUFCO" FORGES

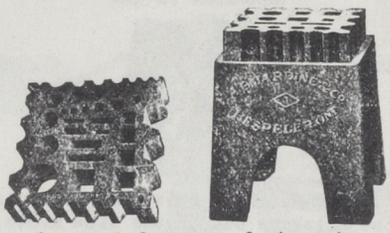


These Forges are made with a heavy, one-piece, drawn steel hearth, perfectly formed, without seams or corners to collect moisture and rust. The Hearth is stronger and more durable than cast iron, and is considerably lighter. "BUFCO" blower is regularly furnished

No.	Size of Hearth	Hood	Net Price
061	18" Dia. 3" deep	Windshield	18.20
061H	18" Dia. 3" deep	Half-hood	19.90

MACHINERY and SUPPLIES

SWAGE BLOCK AND STAND



Carefully designed, the holes are of sizes to suit any conceivable want, while the swage shapes on the edges of the blocks are a good practical substitute, at a nominal cost, for a very expensive set of forged swages, which in an ordinary shop are only occasionally required. The holes are cored with fine sand and are smooth and true.

SWAGE BLOCKS ONLY

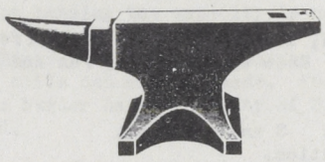
No.	Size Inches	Weight Lbs.
1	12¼ x 12¼ x 4½	110
2	18¼ x 18¼ x 4¼	215

SWAGE BLOCK STANDS ONLY

No.	Weight Lbs.
1	140
2	235.

FACTORY SHIPMENT ONLY. PRICES ON APPLICATION

"WESCO" ANVILS

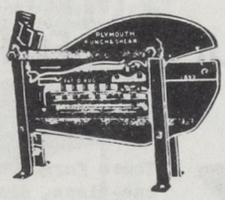


Blacksmith's Pattern

These Anvils are made of Cast Steel, with Case Hardened face. Suitable for all types of Blacksmith work. The face of every Anvil is tempered to stand the greatest wear, but it is impossible to so temper the faces of Anvils that they will withstand all kinds of treatment inasmuch as the very best Anvil is liable to be injured or spoiled by misuse. Careless leaving on the Anvil face of a hot piece of work will tend to draw the temper and render the face soft. A dash of cold water on the face after use will prevent this happening.

Weight	Size of Face Approx.	Length Overall	Net Price
100 lbs.	3⅛" x 13"	22"	36.30
125 lbs	3⅜" x 14½"	24½"	43.45
150 lbs.	3¾" x 15⅛"	26⅛"	52.30
175 lbs.	4¼" x 15¾"	27⅛"	55.00
200 lbs.	4½" x 17	29"	59.80

PLYMOUTH MULTIPLE SHEAR AND PUNCH



The only Punch and Shear on the market that will punch seven different holes without the use of a wrench or tool of any kind. The punches and dies are all mounted and set in a carefully machined casting which engages the plunger block on any size punch desired.

The position of any punch may be changed in a moment.

Will punch 1/4, 5/16, 3/8, 1/2, 5/8, 3/4, 7/8 inch holes, 1/2 inch holes in 3/8 inch iron.

Shear will cut 1/2 x 4 or 5/8 x 3 inch flat iron and 3/4 inch round iron. Punches are 1/32 inch oversize.

PLYMOUTH MULTIPLE PUNCH AND SHEAR, WITH ROUND PUNCHES AND DIES. Complete Net Price. $235.00

WITH SQUARE PUNCHES AND DIES. Price on Application.

EDWARD'S CUTTING SHEARS



The top jaw is moved by a small diameter pinion on which is cast three lever sockets standing at different positions. A Complete revolution of the pinion closes the jaw. The Shear is fastened to the floor with one lag screw allowing it to swing around to any position. Knives are 7 inches long, cuts 1/2 x 4 or 3/4 inch round iron, or mild steel, and 1/4 x 6 1/2 inch plow steel. Handle supplied at an extra charge.

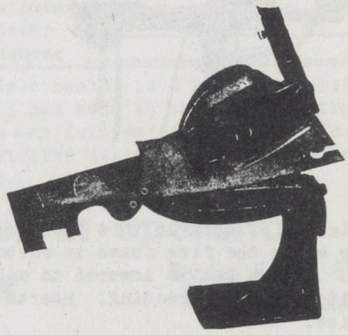
No. 5 Edwards' Shear	Net Price	$80.00
Extra Blades	Net Price per pair	10.00

MODEL No. 10

Cuts 3/4 x 4 inch flat, 1 inch round or mild steel, also 5/16 x 6 1/2 inch plow steel.

No. 10 Edwards' Shear	Net Price	$147.40
Extra Blades	Net Price per pair	10.00

BEVERLY THROATLESS SHEAR



The Beverley Throatless Shear is the most efficient on the market, for intricate cutting jobs, and is equal to any ordinary shear for straight work. Unusually strong and durable it requires very little attention. The geared rack and pinion construction gives great power with little effort. Our special design makes it possible to turn the metal to any position while cutting; it allows any shape to be cut on the lighter metals without distortion. The body, high grade heat treated alloy steel, the blades are made from the highest grade of tool steel, and are adjustable for wear and quickly interchangeable. The Shear is made in three sizes.

SPECIFICATIONS

No. B-1--14 Gauge Shear		No. B-2--10 Guage Shear	
Weight	18 lbs.	Weight	35 lbs
Height less handle	14 ins.	Height less handle	15 ins
Handle	18 ins.	Handle	24 ins
Width	7 ins.	Width	9 ins
Depth	9 ins.	Depth	10 ins
Power...Hand Geared Rack and pinion		Power...Hand Geared Rack and pinion	
Length Blades Ins.	4 1/4	Length Blades Ins.	4 3/8
Net Price	55.00	Net Price	
Equipped with High Carbon Blades for cutting 18 Gauge stainless steel		Equipped with High Carbon Blades for cutting 14 Gauge stainless steel	
Net Price	$61.40	Net Price	

MODEL B-3

A HEAVY DUTY BENCH TYPE

CUTS ALL SHAPES STRAIGHT AND IRREGULAR

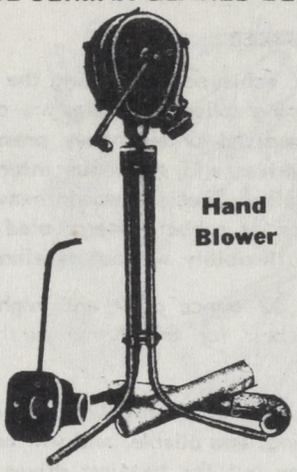
Weight	58 lbs.	Power...Hand Geared Rack and pinion	
Width	9 ins.		
Handle	30 ins.	Maximum shearing capacity. U.S. Steel	3/16
Height-less handle	15 ins		
Length Blades Ins.	5 5/8	Maximum Alloy Shearing	
Depth	14 ins.	Capacity. 10 Gauge or	1/8

Net Price complete with HIGH CARBON Blades. $162.80

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

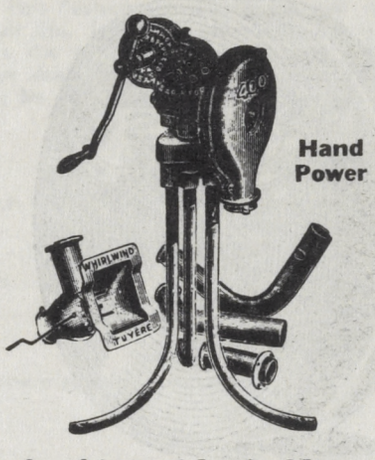
MACHINERY and SUPPLIES

No. 700L CLIMAX GEARED BLOWER



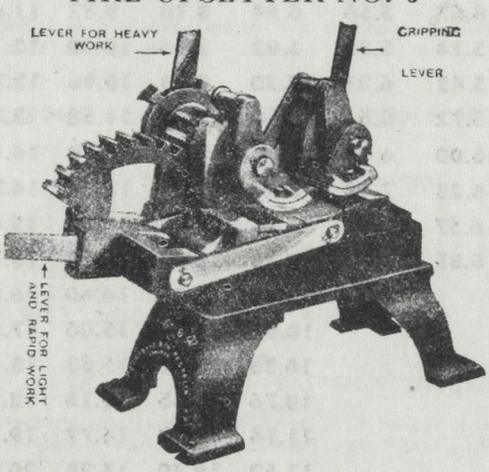
A light, high power, unbreakable and inexpensive blower head, steel cut gears, quiet in operation, enclosed in all steel case, rated 47½ to 1.
Bronze bushings and first class construction throughout.
No. 700L with Climax Tuyere
Net Price: $37.15
No. 700L with Vulcan Tuyere
Net Price: $41.95

No. 400—CHAMPION



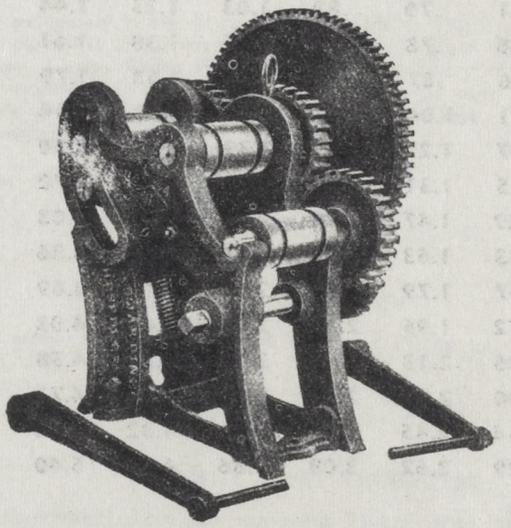
Gearing and adjustable ball bearings are constructed from the highest grade phosphor bronze and tool steel, with cups and cones hardened and ground to the highest possible polish, thus making the most durable, practical bearings and gearing that can be constructed.
Diameter of fan, 12 ins. Complete with Tuyere Iron and Pipe.
No. 400 Champion Blower
Net Price: $94.80

TIRE UPSETTER NO. 6



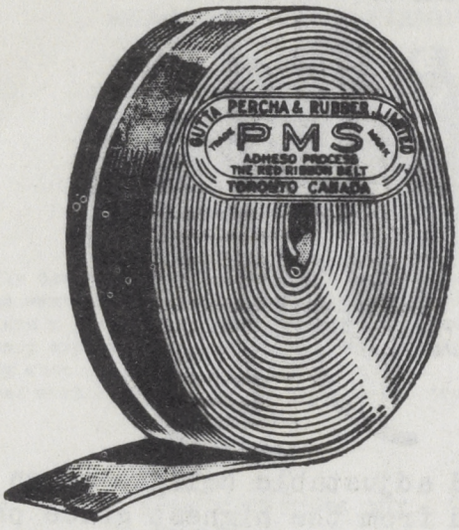
Has two pulling levers, one for light work and one with heavy gearing, giving ample power for the heaviest work.
Both upper gears are operated by one lever with equalizing links that adjust them to uneven thicknesses, giving a quick and sure grip.
Jaws are faced with plates of tool steel with machine cut teeth carefully tempered.
Upsets tires up to 4" wide by 1" thick, and axles up to 1¼ inches.
Net Price: $86.00

NO. 4 TIRE BENDER



All the rollers are geared. Rollers are grooved for bending circles edgewise.
Unless otherwise ordered grooves are made for 3/8" and 1/2" iron.
Will take iron up to 6" wide, bends up to 4" x 1", or wider iron of proportionate thickness, or 1 3/4" x 5/8", edgewise for circles.
All our Benders have centre rollers removable.
No. 4 Tire Bender (Price on Application)

RUBBER BELTING



RUBBER

Duraflex. Endless construction, achieved by building the belt of a number of plies with a stepping splice. The plies are cemented, placed together and vulcanized under heavy pressure to form the splice. Extra hard drives and strenuous intermittent loads have little effect on Duraflex. Specially woven heavy duck and a heavy pure gum cushion of rubber waterproofed square edges designed for maximum flexibility without ravelling.

Trojan. A Red Belt built of 32 ounce duck and high grade friction. A good serviceable belt for the Agricultural trade; unusually strong and pliable.

P.M.S. A friction surface belt built of 28 ounce duck. This belt is of medium weight, strong, and pliable, and will be found reliable and satisfactory on any but the heaviest drives.

RUBBER BELTING—LIST PRICES

Inches	2-Ply	3-Ply	4-Ply	5-Ply	6-Ply	7-Ply	8-Ply
1	$ .18	$ .20	$ .24	$ .30	$ .36	$ .42	$ .48
1¼	.23	.26	.30	.38	.45	.53	.60
1½	.27	.31	.36	.45	.54	.63	.72
1¾	.32	.36	.42	.53	.63	.74	.84
2	.34	.39	.46	.58	.69	.80	.91
2½	.42	.48	.56	.70	.84	1.00	1.14
3	.48	.55	.65	.81	.98	1.13	1.30
3½	.57	.65	.76	.95	1.14	1.32	1.51
4	.61	.70	.82	1.03	1.23	1.44	1.63
4½	.68	.78	.92	1.15	1.38	1.61	1.84
5	.76	.87	1.02	1.28	1.53	1.79	2.04
6	.91	1.04	1.22	1.53	1.83	2.14	2.44
7	1.07	1.22	1.43	1.79	2.15	2.50	2.86
8	1.15	1.31	1.54	1.93	2.31	2.70	3.08
9	1.29	1.47	1.73	2.16	2.60	3.03	3.46
10	1.43	1.63	1.92	2.40	2.88	3.36	3.84
11	1.57	1.79	2.11	2.64	3.17	3.69	4.22
12	1.72	1.96	2.30	2.88	3.45	4.03	4.60
13	1.86	2.13	2.50	3.13	3.75	4.38	5.00
14	2.00	2.29	2.69	3.36	4.04	4.71	5.38
15	2.14	2.45	2.88	3.60	4.32	5.04	5.76
16	2.29	2.62	3.08	3.86	4.62	5.40	6.16

Inches	2-Ply	3-Ply	4-Ply	5-Ply	6-Ply	7-Ply	8-Ply
18	2.57	2.94	3.46	4.32	5.20	6.06	6.92
20	2.85	3.26	3.84	4.80	5.76	6.72	7.68
22	3.14	3.59	4.22	5.28	6.34	7.38	8.44
24	3.42	3.91	4.60	5.76	6.90	8.06	9.20
26	3.71	4.26	5.00	6.26	7.50	8.76	10.00
28	4.00	4.57	5.38	6.72	8.08	9.42	10.76
30	4.29	4.90	5.76	7.20	8.64	10.08	11.52
32	4.59	5.25	6.16	7.72	9.24	10.80	12.32
34	4.87	5.56	6.54	8.18	9.82	11.46	13.08
36	5.14	5.87	6.92	8.64	10.40	12.12	13.84
38	5.43	6.21	7.30	9.13	10.96	12.78	14.60
40	5.72	6.54	7.68	9.60	11.52	13.44	15.36
42	6.00	6.86	8.06	10.08	12.10	14.10	16.12
44	6.28	7.18	8.44	10.55	12.68	14.76	16.88
46	6.57	7.51	8.82	11.03	13.24	15.44	17.64
48	6.85	7.83	9.20	11.50	13.80	16.12	18.40
50			9.60	12.00	14.40	16.82	19.20
52			10.00	12.50	15.00	17.52	20.00
54			10.38	12.98	15.58	18.18	20.76
56			10.76	13.45	16.16	18.84	21.52
58			11.14	13.93	16.72	19.50	22.28
60			11.52	14.40	17.28	20.16	23.04

PLEASE NOTE!

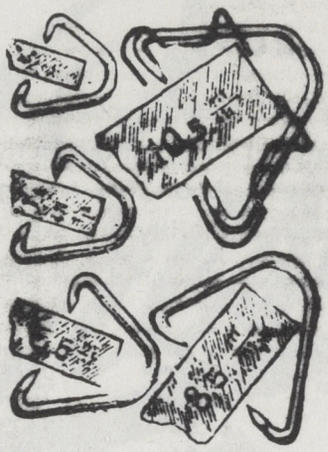
The prices shown above are manufacturers' list, and take different discounts for brand or quality chosen. Discounts are shown below.

	Broken Lots	250 ft. Rolls	500 ft. Rolls
Duraflex. List Less	31%	31/5%	31/10%
Trojan. List Less	49%	49/5%	49/10%
P.M.S. List Less	40%	40/5%	40/10%

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

BELTING AND SUPPLIES

GEM BELT FASTENERS



ACTUAL SIZES

The Fasteners comprise a series of wire hooks, housed on a strong paper frame which is not removed until the hooks are firmly embedded into the belt.

In boxes containing 162 ins. in 12 inch lengths complete with pins for connecting.

Nos.		Net Price
2	For belts not over 1/8 inch thick. Per box	**$2.35**
3	For belts not over 3/16 inch thick. Per box	**2.39**
4	For belts not over 1/4 inch thick. Per box	**2.39**
5	For belts not over 3/8 inch thick. Per box	**2.82**
6	For belts not over 7/16 inch thick. Per box	**3.52**

FLEXIBLE STEEL BELT LACING

This lacing is a smooth separable hinge joint of extreme strength which protects the ends of Fabric Belts and allows any Belt to be used with an Idler Pulley.

No special skill is required to lace or repair a Belt, a hammer is all that is required.

ARMSTRONG BRAY STEEL GRIP FLEXIBLE BELT LACING

No.	Thickness of Belt	Contents	Net Per Box
15A	1/8" to 5/32" thick	8 sets for 8" belt	**$3.13**
25F	3/16" to 7/32" thick	6 sets for 8" belt	**3.02**
25G	3/16" to 7/32" thick	8 sets for 12" belt	**6.03**
27K	9/32" thick	6 sets for 8" belt	**3.20**
35M	9/32" to 5/16" thick	4 sets for 8" belt	**2.78**
35N	9/32" to 5/16" thick	4 sets for 12" belt	**4.10**

CRESCENT BELT FASTENER RIVETS

For attaching Crescent Plates 3/16 inch longer than the thickness of Belt to allow for thickness of Plate and for proper clinch.

Nos.	Length Inches	Net Price Per Gross	Nos.	Length Inches	Net Price Per Gross
L7	7/16	**$1.20**	L11		**$1.60**
L8	1/2	**1.28**	L12		**1.67**
L9	9/16	**1.38**	L13		**1.77**
L10	5/8	**1.49**	L14		**1.88**

FOR JUMBO PLATES

Use a Rivet 7/8—16" longer than thickness of Belt to allow for proper clinch.

Nos.	Length Inches	Net Price Per Gross	Nos.	Length Inches	Net Price Per Gross
J12	3/4	**$2.05**	J14	7/8	**$2.32**
J13	13/16	**2.13**	J16	1	**2.60**

CRESCENT BELT FASTENERS

Crescent Belt Fasteners maintain the full strength of the belt for its full life. Joint is permanent and not subject to wear. Eliminates the expense, trouble, delay and losses caused by careless or destructive methods and assures continuous operation; may be used on all kinds of belting.

SHORT GRIP

For 3 inch Belts where smaller pulley is 3 inches in diameter or larger.

No. 805	Net Price
Per Gross	**$17.00**

MEDIUM GRIP

For use where smaller pulley is 6 inches in diameter or larger.

Nos.	For Belt Inches	Net Price Per Gross
607	2 and 4	**$12.80**
107	3 and 6	**21.30**
147	4 and 8	**29.80**

For wider belts than 4 inches on pulleys 6 inches diameter or larger use two or more plates to cover entire width of belt.

LONG GRIP

For use where smaller pulley is 12 inches in diameter or larger. Are attached with three rows of Crescent Large Shank Rivets, giving a triple hold on the Belt, and are adapted for Belts running under a heavy strain.

Nos.	For Belt Inches	Net Price Per Gross
109	2 1/2	**$25.55**
149	3	**34.05**
1409	3 1/2	**38.30**
189	4	**42.60**

JUMBO

For extremely heavy work on large pulleys. The Crescent Rivets are placed in triple rows, giving a joint of great holding power. These Jumbo Plates conform to the periphery of the pulleys 24 inches or larger in diameter, and can be used on conveyor work at slow and medium speeds on pulleys 18 inches in diameter or larger.

Nos.	For Belt Inches	Net Price Per Gross
1011		**$34.05**
1611		**42.60**

FARM ASSORTMENT

An assortment containing 4 Crescent Plates each, Nos. 107 and 607, together with 1/2 Gross No. L8, 1/2 Large Shank Rivets.

Farm Assortment. Net Price	**$1.50**

CRESCENT RIVET EXTRACTOR

A convenient Tool for removing Rivets when shortening or removing Belt.

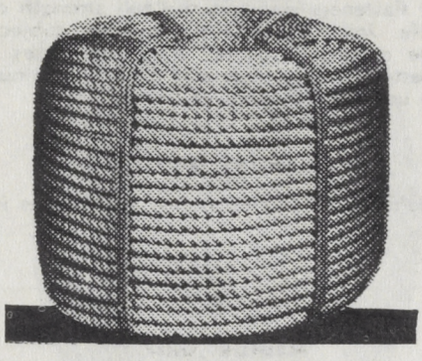
No. 79—Net Price Each	**$2.50**

CLING-SURFACE

Cling-Surface is a special preservtive for Belts and Ropes, is not sticky, contains no resin or other harmful elements. Stops slipping, so all belts can be run easy or slack and transmit full load.

	Net Price
Pints	**$1.35**
Quarts	**2.45**
Gallons	**7.20**
1-lb. Sticks	**.80**

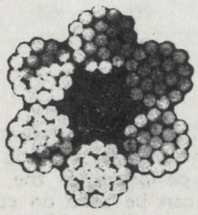
ROPE AND WIRE CABLE



ROPE

Rope is always sold by Diameter measurement. If circumference is stated it must be distinctly stated on order. Manilla Rope is about 25% stronger than Sisal, is far superior in durability and will work in water and weather which Sisal will not withstand.

Size Diam. Ins.	Lgth. per Coil in Feet	Approx. Wt. per Coil Lbs	Approx Feet per Lb	Price per Lb. 1st Grade Invincible	Price per Lb. 2nd Grade Gourock Manilla	Price per lb. Gourock Sisal
3/16	3508	50	75	**$ .95**	**$ .79**	**$ .65**
¼	2847	58	58	**.94**	**.77**	**.64**
5/16	1921	35	35	**.94**	**.77**	**.64**
⅜	1421	27	27	**.91**	**.76**	**.62**
7/16	1200	70	17	**.89**	**.74**	**.61**
15/32	1200	85	15.5	**.89**	**.74**	**.61**
½	1200	90	14	**.89**	**.74**	**.61**
9/16	720	69	10	**.89**	**.74**	**.61**
⅝	720	94	7.66	**.88**	**.74**	**.60**
¾	720	112	6.5	**.86**	**.73**	**.59**
13/16	720	146	5	**.86**	**.73**	**.59**
⅞	720	172	4.17	**.86**	**.73**	**.59**
1	720	206	3.5	**.86**	**.73**	**.59**



STANDARD PLIABLE HOISTING

This cable is suitable for derrick use and heavy hoisting; made of crucible cast steel, 6 strands of 19 wires each; Hemp centre, having very great tensile strength. All wires are carefully tested as to stregnth elongation and tension, the combination of which makes an absolutely perfect cable.

Diameter, Inches	¼	5/16	⅜	7/16	½	⅝	¾	⅞	1
Circumference, Inches	¾	1	1⅛	1⅜	1⅝	2	2⅜	2¾	3⅛
Breaking Strain	2.0	3.0	4.3	5.7	7.75	12.25	17.5	23.0	31.0
Weight per 100 ft., lbs.	.10	.15	.22	.30	.40	.62	.90	1.20	1.58
Price per 100 ft.	**$12.65**	**$13.30**	**$14.40**	**$15.30**	**$17.70**	**$22.95**	**$30.50**	**$40.15**	**$49.60**

BEST PLOW STEEL HOISTING

Used in place of cast steel for similar work where greater strength is necessary; 6 strands of 19 wires each; Hemp centre. Decreases dead weight and increases strength without increasing diameter. For uses requiring maximum strength.

Diameter, Inches	¼	5/16	⅜	7/16	½	⅝	¾	⅞	1
Circumference, Inches	¾	1	1⅛	1⅜	1⅝	2	2⅜	2¾	3⅛
Breaking Strain	2.45	3.8	5.4	7.0	10.0	15.0	21.5	28.3	38.0
Weight per 100 ft., lbs.	.10	.15	.22	.30	.40	.62	.90	1.20	1.58
Price per 100 ft.	**$13.25**	**$14.00**	**$15.15**	**$16.10**	**$18.60**	**$24.15**	**$32.10**	**$42.24**	**$52.15**





WIRE CABLE CLIPS

	¼ - 5/16	⅜	½	⅝	¾	⅞	1
Each	**$ .40**	**$ .45**	**$ .50**	**$ .60**	**$ .85**	**$1.20**	**$1.25**

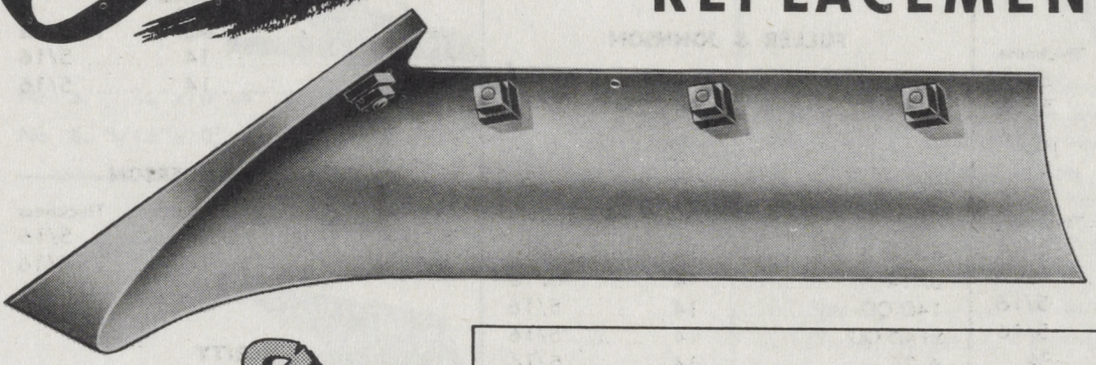
CABLE THIMBLES

	¼	⅜	½	5/9	¾	⅞	1
Each	**$ .04**	**$ .06**	**$ .08**	**$ .10**	**$ .12**	**$ .22**	**$ .25**

IT IS A PLEASURE TO SERVE YOU.

Crescent

THE WORLD'S LEADING REPLACEMENT SHARES



8 REASONS why CRESCENT is your Best Buy

1. **The world's largest manufacturer of duplicate plow share with over 45 years of leading experience.**
2. **All shares made of top quality material, well made, thoroughly ground and polished.**
3. **Guaranteed to fit and free from defects.**
4. **Wide variety of patterns meeting all requirements in the entire field.**
5. **Good stock of shares maintained by D. Ackland's at all times.**
6. **Crescent, the first company to make fitted shares for replacement, are the established leaders in their field.**
7. **Quality is the prime consideration in the manufacture of Crescent shares.**
8. **Crescent shares are well advertised to help you sell.**

Guarantee

We guarantee all goods of our manufacture to be made of the best quality steel for the purpose intended and to be made in a workmanlike manner. Fitted parts are warranted to fit the implement for which they are intended. The fit of each part is carefully tested before leaving the factory and every precaution is taken against error. Should any share prove defective in fit, material or workmanship, it will be cheerfully replaced free of charge.

CRESCENT PLOW SHARES

"SPECIFICATIONS"

CANTON

No.	Length	Thickness
264	12	5/16
0552 QD	12	5/16
266	14	5/16
462 QD	14	5/16
SA3844 QD	14	3/8
0554 QD	14	5/16
0560 QD	14	5/16
268	16	9/32
0556 QD	16	5/16
0562 QD	16	5/16

CASE

No.	Length	Thickness
ADHL 12	12	5/16
ADHL 14	14	5/16
QADH QD	14	5/16

COCKSHUTT

No.	Length	Thickness
JG 12	12	5/16
JG 12H	12	3/8
P3769 QD	12	5/16
JG 14	14	5/16
JG 14H	14	3/8
P3772 QD	14	5/16
P4086 QD	14	5/16
JGSH	14	3/8
P2070	14	5/16
P3742 QD	14	3/8
P3754 QD	14	3/8
JGS	14	5/16
P5370	16	5/16

DEERE

No.	Length	Thickness
215 QD	12	5/16
152	12	5/16
Y41	12	5/16
31	12	5/16
216 QD	13	5/16
161	13	5/16
X41	13	5/16
217 QD	14	5/16
205 QD	14	3/8
157	14	5/16
232 QD	14	5/16
207 QD	14	5/16
X42	14	5/16
250 QD	14	3/8
218 QD	16	5/16
162	16	5/16
40	16	5/16
46	16	5/16

EMERSON

No.	Length	Thickness
N12 R	12	5/16
N12 R9 QD	12	5/16
N13 R	13	5/16
N14 R	14	5/16
N14 R9 QD	14	5/16
N14 R8 QD	14	7/16
N14 R15 QD	14	5/16
N16 R	16	5/16

FORD-FERGUSON

No.	Length	Thickness
12A-A0120 QD	12	5/16
12A-A0131 QD	12	5/16
12A-A0121	12	5/16
14A-A0120 QD	14	5/16
14A-A0131 QD	14	5/16
14A-A0121	14	5/16
R103	14	5/16
16A-A0120 QD	16	5/16
16A-A0131 QD	16	5/16

FULLER & JOHNSON

No.	Length	Thickness
14 UR	14	5/16

GRAND DETOUR

No.	Length	Thickness
BX12	12	5/16
BX14	14	5/16
14D QD	14	5/16
S14D QD	14	5/16
A-25	14	5/16
BX16	16	5/16
16D QD	16	5/16

HAMILTON

No.	Length	Thickness
6181 QD	12	5/16
6306 QD	12	5/16
6182 QD	14	5/16
6307 QD	14	5/16
6199 QD	16	5/16

LACROSSE

No.	Length	Thickness
LAX 1912 QD	12	5/16
LAX 11-12 QD	12	5/16
LAX 1914	14	5/16
LAX 11-14	14	5/16
LAX 26 QD	14	3/8
30801 QD	14	3/8
LAX 11-16	16	5/16
LAX 1916 QD	16	5/16

MOLINE

No.	Length	Thickness
CY 12	12	5/16
DW 12	12	5/16
CY 121 QD	12	5/16
CY 14	14	5/16
DW 14	14	5/16
DAC 14 QD	14	3/8
CY 142 QD	14	5/16
DW 141 QD	14	5/16
DW 142 QD	14	5/16
CY 16	16	5/16
DAC 16 QD	16	3/8
DW 16	16	5/16

OLIVER

No.	Length	Thickness
NC23-12	12	5/16
4674 QD	12	5/16
NC23-14	14	5/16
NC37-14	14	5/16
CA161 Bolt	14	5/16
4675 QD	14	5/16
NC28 QD	16	5/16
NC 162	16	5/16

ROCK ISLAND

No.	Length	Thickness
68	14	5/16
268 QD	14	5/16

TUDHOPE ANDERSON

No.	Length	Thickness
87 QD	14	5/16
408	14	5/16

VERITY

No.	Length	Thickness
P2914	12	9/32
P7146	12	5/16
P9662 QD	12	5/16
P12644 QD	12	5/16
P7148	14	5/16
12648 QD	14	5/16
9665 QD	14	3/8
12998 QD	16	5/16
7155	16	5/16

QUICK REPAIR

Thickness	Length	Length	Thickness
5/16	12	12	5/16
5/16	14	14	5/16
5/16	16	16	5/16

HYDRAULICS

We also carry for Agricultural Implements.

Hydraulic Pumps
Hydraulic Valves
Hydraulic Quick Connectors
Hydraulic Hose
Hydraulic Renewable Couplings
Hydraulic Reseroir Tanks
Hydraulic Cylinders

Write for details and prices.

STEEL PLOW PARTS

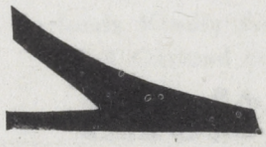
CRUCIBLE STEEL



Sheared only—not bevelled.

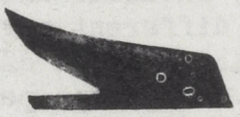
No. 0. 5/16"x8½"x2½". List Price, Each.....$ .23
No. 0. ⅜"x8½"x2½". List Price, Each..... .23

MEDIUM POINT



No. 5. ¼"x10"x4". List Price, Each.....$ .54
No. 5. 5/16"x10"x4". List Price, Each..... .54

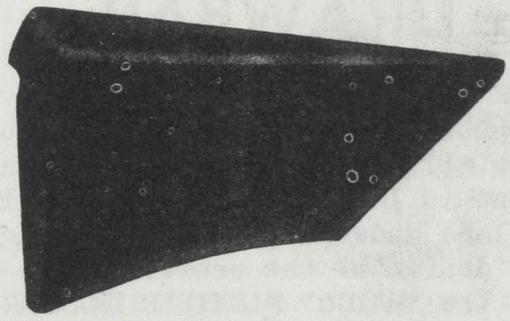
WIDE POINT



No. 6. ⅜"x8"x3½". List Price, Each.....$ .55

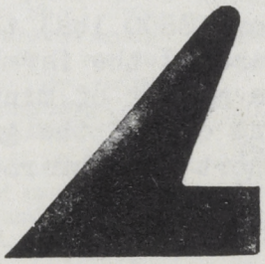
WELD ON PLOW POINTS

These points are becoming very popular as they help the blacksmith repair the shares very quickly. They are bevelled redy for electric welding and all there is to do is cut off the point of the share and weld on the new point. They come in two sizes No. 8 and No. 10, No. 8 being smaller than No. 10.



No. 8. List Price, Each.....$ .52
No. 10. List Price, Each..... .58

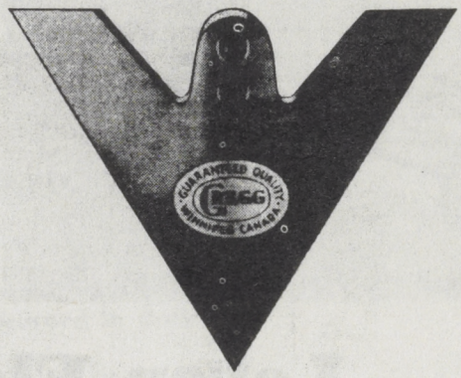
INDIANA FIN CUTTER



No. 5. 5"x¼". List Price, Each.....$1.82

DUCK FOOT CULTIVATOR SHOVELS

Fully Polished **Complete with Bolts**



Style A will fit Deere, Cockshutt, Rock Island, Ford-Ferguson.
Style B will fit Case, Oliver and Allis-Chalmers.
Style I will fit International Harvester (Deering-McCormick)
Style M will fit Massey-Harris.

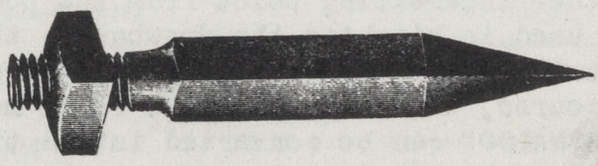
	With Bolts
5" Shovel. ¼" thick. List Price, Each	$1.05
8" Shovel. ¼" thick. List Price, Each	1.09
10" Shovel. ¼" thick. List Price, Each	1.22
12" Shovel. ¼" thick. List Price, Each	1.50
14" Shovel. ¼" thick. List Price, Each	1.74

QUACK GRASS POINTS OR TEETH FOR STIFF TOOTH CULTIVATORS

			List Price With Bolts
C	2x3/16x 9.	Cockshutt Single Point	$ .80
D	2x5/16x10.	Deere—to fit Deere N-743	.86
Int. - 1	2x5/16x10½.	International to fit IHC. F-15561	.86
Int. - 2	2x5/16x11.	International to fit IHC. F-15561	.86
MH - 1	2x5/16x 6½.	Massey Harris Single Point	.65
MH - 2	2x5/16x 8½.	Massey Harris Double Point	1.10

HARROW TEETH—THREAD AND NUT

Specify if long or short.

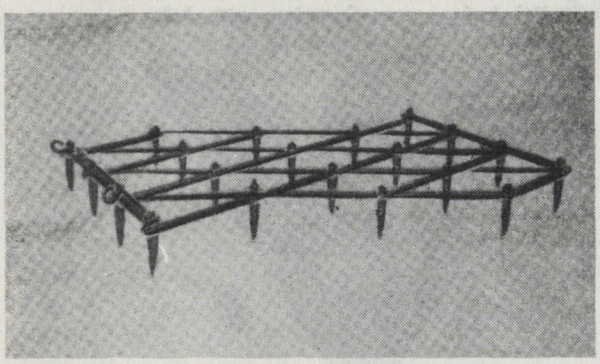


Made of best grade Harrow Tooth Steel. Bodies, 9/16" on square, shank ½" and ⅝" on square, shank 9/16" threaded, complete with nut.

9/16". List Price, per 100.....$11.20
⅝". List Price, per 100..... 13.65

DRAG HARROW SECTIONS

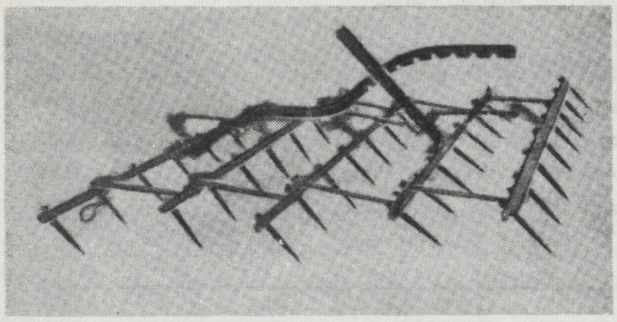
Diamond Harrow Sections



Our DIAMOND HARROW SECTIONS weigh 60 lbs. and are constructed of special high carbon harrow channel, 1 1/4 inches wide harrow flat, 5/8 inches square harrow teeth, and one piece forged pigtails.

$9.15 Each

Lever Flexible Sections

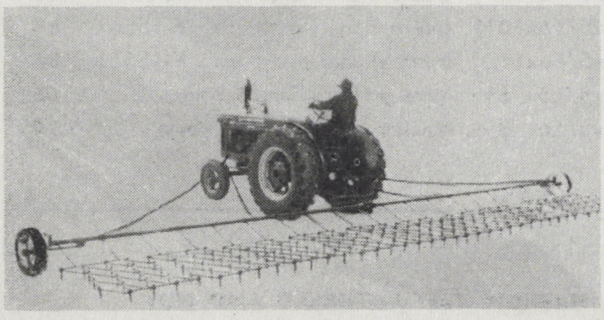


Harrow set for shallow penetration

This lever flexible harrow section has been proven by years of use under the most trying conditions and is accepted as the most satisfactory and popular harrow on the market. This harrow is fully flexible with the teeth adjustable to eight different angles for deep or shallow penetration. Width of cut is a full five feet with forty feet per section. Each section weighs approximately 92 lbs., can be folded into a compact bundle for transportation or storage, and is constructed of high carbon steel "U" bars and harrow teeth to insure long and trouble free service.

$18.60 Each

FLEXIBLE ROLLING DRAWBAR



This DRAWBAR has been designed has been designed to fulfill the need of a flexible Drawbar that will enable the user to Harrow on ridges and in land depressions as well as on flat land under high speed farming. Through the design of the center joint the arms of the "MALCO" FLEXIBLE DRAWBAR can raise or lower together or independently, following the contour of the land allowing no undo strain on the arms or joint.

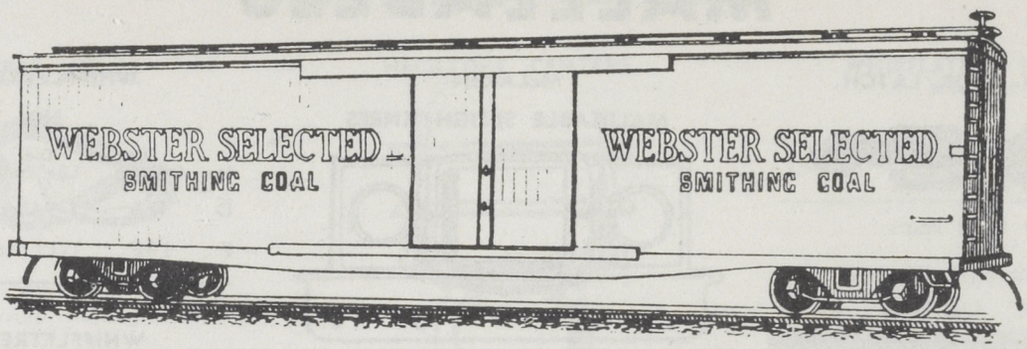
Another interesting point from the position of the user is the fact that chains are used in hitching the drawbar to the tractor giving the user two, twenty-five foot lengths of heavy 9/32" chain (Breaking point approx. 3600 lbs) that can, of course, be used year round for a multitude of jobs around the farm.

The "MALCO" can be converted into a transport cart in a matter of minutes. There are no nuts to loosen, simply slip the pull chains out of the grab links, roll the wheels back and you are ready to transport your harrows to another field or back to the farm yard.

$109.80 Complete.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

WEBSTER SELECTED SMITHING COAL



SHIPPED DIRECT FROM THE MINE IN SEALED BOX CARS

If Interested in Carloads Kindly Advise Us When We Will Quote Prices Delivered to Your Station
A Carload consists of 30 Tons or More Shipped in Bulk

We can furnish empty sacks at best market prices.

Did you ever stop to think that poor coal may be the chief cause of your troubles?

If you will go to the root of the work and examine the coal you are using, you will soon find out what has been causing all the damage.

First—When your coal arrives crack open several pieces the size of your fist. If you see small yellow or brown deposits between the layers it means **Sulphur. It is impossible to weld with sulphur in the fire, and sulphur is bad for both iron and steel.**

Second—Look at the fire when it is burning freely and see if there is a blue edge around the flame—another sure sign your coal contains an excessive amount of **sulphur.**

Third—With a free burning fire and coke forming, look carefully at the coke around the edges of the fire. Unless it is solid and of a clear grey color, your coal contains a large quantity of **dirt. Heat is wanted in the centre of your fire, instead, you get nothing but big scales which is caused by dirt in the coal.**

Fourth—Give your coal pile a careful examination and see if you cannot pick from the surface of the pile alone a good many pieces of dull grey **slate. From such coal you can expect nothing but clinkers.**

Fifth—When your fire is hot in spots, or hot for a short time but drops out, you are not using good smithing coal. **It is low in heating efficiency. By using Webster Selected Smithing Coal you overcome this difficulty.**

Sixth—If you have to clean out the fire every heat or two and the coke is light and soft **you are using poor coal.**

Why not make these tests today. Then try Webster and see what a difference.

Webster Selected Smithing Coal was the discovery of a Blacksmith It is mined from a special vein, always from the same mine thus assuring uniform quality.

Webster coal gives steady heats. There are no sulphur traces that a smith can notice either in the fire or in the finished work. Is free from slate and dirt, and you will not find a lot of clinkers around a Webster fire.

List Prices

WEBSTER'S FINEST COAL

From Winnipeg—Sacked

½ ton lots or more $42.66 per ton
less than ½ ton 2.27 per 100 lbs.

From Mine

In Car load Bulk—30 Tons or more per Ton—On Application.
Coal will be sacked at a small extra charge.
Duty Paid—F.O.B. Mine.

CHARCOAL LUMP

The ideal Charcoal for starting your fires. Also used for pre-heating in welding.

Per Bushel (20 lbs.) 1.28

Sacks Extra (Returnable) ..... .67

BUILDING A FIRE

When building a fire, first remove all the ashes and cinders from the centre of the forge end down to the tuyere. Next place some shavings over the tuyere and light them. After they have burned well sprinkle some coke on them and turn on a slight blast until the coke is well started. Now add **wet coal** to the **sides** of the fire until a mound of it has shaped over the fire leaving an opening in the **front. Do not allow the fire to break through at any other point.** When the coal is well coked it is ready for use.

When adding new fuel do not place it directly on the fire, but **around the fire opening,** so that the coal will coke up well before being raked into the flame. If the new coal is **well soaked with water** there will be no trouble in keeping the fire within bounds and well supplied with coke.

When a large deep fire is required an excellent method is to place a large block of wood on top of the tuyere after the cinders and ashes have been removed and then pack **green coal** in two mounds on each side. The block is then taken out and a fire started between the mounds.

Do not bank a fire with ashes as this is liable to cause clinkering in any coal.

If you use **Webster** right it will use you right. **Do not mix with cheap coal.**

You will never regret using Webster Coal for all your firing needs, it is the finest money can buy, and remember you can buy a sackful or a carload.

D. ACKLAND & SON, Limited

Head Office: WINNIPEG • *Branches:* DAUPHIN, BRANDON, CALGARY AND EDMONTON.

MALLEABLES

PERFECTION DOOR LATCH



For right hand doors.

No. 5686—

Length 10¾"x2½". List Each **$1.59**

END GATE FASTENERS

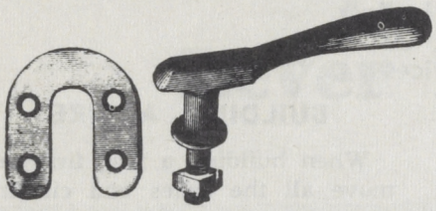


Plate Length 2¼". Handle Length 4½".

Slot ⅝". Shank 1⅜".

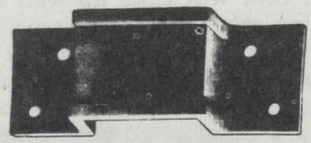
No. 5705—List Per Set ..... **$ .32**

END GATE HINGES

No. 5810—

No.	Panel	Width	List Pair
A	9"	¾"	**$ .59**
B	13"	1"	**.72**

MALLEABLE STAKE POCKETS



No. 5995—

No.	Meas. Ins.	List Each
A	1½x2½	**$ .67**
C	1½x3	**.71**

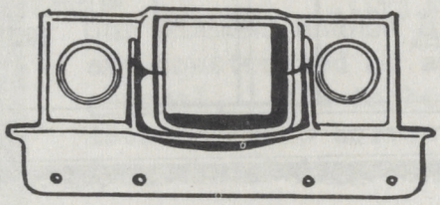
No. 5990—

No.	Meas. Ins.	List Each
A	1 x2	**$ .37**
B	1⅛x2¼	**.44**
C	1¼x2½	**.49**
D	1½x3	**.68**

STEEL STAKE POCKETS

No.	Meas. Ins.	List Each
A	2¼x1⅛	**$ .37**
B	2½x1¼	**.39**
C	3 x1½	**.40**

McLAREN
MALLEABLE SLEIGH KNEES



For Runner Inches	Size of Box Inches	List Per Set
3	6 x6¾	**$ 87.33**
4	6¾x9¼	**146.67**

START PIN PLATES
WROUGHT STEEL

Width Inches	Depth Inches	Thick Inches	For Pin Inches
5½	5	⅛	¾ or ⅞

List Price, Each ..... **$ .28**

List Price, Per Set of 8 Pieces **2.20**

HALF PATENT AXLES
No. 23—Short Arm

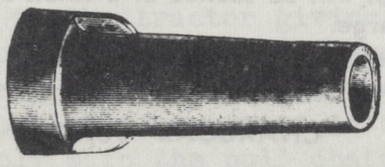
Steel with Cast Double Collar Boxes

Size Arm Box	Weight, Lbs. Per Set of Four	Net Per Set of Four
¾x6½	20	**$10.00**
⅞x6½	23	**10.00**
1 x6	28	**14.25**
1 x6½	29	**14.25**
1⅛x6½	31	**15.60**
1⅛x7	32	**15.60**
1¼x7	35	**20.85**
1¼x7½	36	**20.85**
1⅜x7½	40	**23.00**
1⅜x8	42	**23.00**
1½x8	60	**26.00**
1½x8½	63	**26.00**
1¾x9	76	**36.00**

When ordering specify diameter of square bed, also length of boxing.

When ordering less than full sets specify whether right or left hand.

HALF PATENT AXLE BOXES



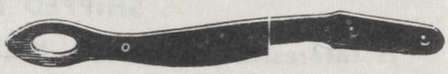
Double Collar

For Axle	List Each
⅞	**$1.53**
15/16	**1.53**
1	**1.68**
1⅛	**1.79**
1¼	**2.19**
1⅜	**2.28**
1½	**2.51**

WHIFFLETREE HOOKS
NO. 115

No.	Dia. Sm. End	Dia. Lge. End	Depth Ins.	List Each
D	1½	1-9/16	1⅝	**$ .56**
E	1⅝	1-11/16	1¾	**.61**

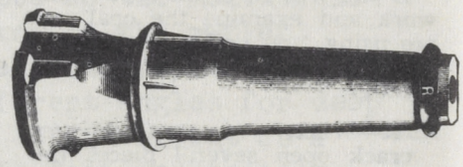
WHIFFLETREE SPRINGS



As used in conjunction with No. 115 Whiffletrees.

No. 116—List Per Pair ..... **$ .68**

WAGON SKEINS



D. V. & Co. Pattern

This is a Standard Cast Skein, perfectly seamless, and with metal thickest at shoulder, where strength is required. Tapers from shoulder to point.

Size	Weight, Lbs. Per Set of Four	Net Per Set of Four
3 x9	58	**$12.60**
3¼x10	74	**15.40**
3½x10	79	**16.15**
3½x11	84	**18.00**
4 x12	116	**22.80**

All Wagon Skeins are supplied with Boxes and Nuts, unless otherwise ordered.

When ordering Skeins in less than full sets, always specify whether right or left hand is required.

NO. 9 FLAT TRUSS

The No. 9 Cast Skein is made to receive Clip and Flat Truss Bar.

The ends of Truss Bar to be bent down back of Clip Bar. No welding required.

Size	Weight, Lbs. Per Set of Four	Net Per Set of Four
3 x9	74	**$14.60**
3¼x10	86	**17.75**
3½x10	106	**18.70**
3½x11	116	**20.90**
3¾x12	130	**23.00**
4 x12	160	**26.10**

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

MALLEABLES

WHIFFLETREE HOOKS



No. 3555—Front Pull

Malleable iron ferrule, wrought steel hook.

No.	Ends Ins.	Dia. of Hook, Ins.	List Each
B	1 3/8x1 1/2	3/8	$ .48
C	1 1/2x1 5/8	3/8	.48
F	1 5/8x1 3/4	7/16	.56
E	1 3/4x1 7/8	7/16	.56

No. 3550—Back Pull



Malleable iron ferrule, wrought steel hook.

No.	Ends Ins.	Dia. of Hook, Ins.	List Each
A	1 1/4x1 3/8	3/8	$ .48
B	1 3/8x1 1/2	3/8	.44
C	1 1/2x1 5/8	3/8	.47
E	1 5/8x1 3/4	7/16	.53
F	1 3/4x1 7/8	7/16	.56

WHIFFLETREE HOOK

No. 3585

Same as above with no ferrule. Wrought steel hook.

No.	Size of Steel, Ins.	List Each
A	3/8	$ .17
B	7/16	.16

WHIFFLETREE CENTERS



No. 3520—Wrought Steel

No.	Rd. Part of Clip Ins.	Steel in Ring Ins.	List Each
A	3/4	2 1/4x5/8	$ .83
B	5/8	2x9/16	.59
C	5/8	2x1/2	.58
G	7/16	2x3/8	.33

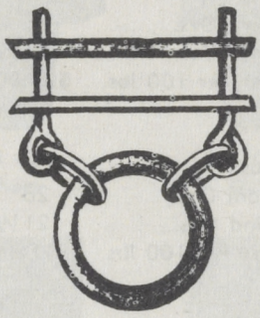
NECKYOKE ENDS

No. 3605

Malleable ferrule, steel ring.

No.	Dia. of Ferrule	Dia. of Ring	List Price Each
C	1 1/2x1 5/8	3/8x3	$ .33
F	1 5/8x1 3/4	7/16x3	.44
E	1 3/4x1 7/8	7/16x3	.39

NECKYOKE CENTERS



Wrought Steel

No. D — 3 1/4x9/16 inch ring, 3/8 inch links, 7/16 inch eyes, 7x1 5/8 plates. List Price, Each ..... $ .82

No. E—4x5/8 inch ring, 7/16 inch links, 1/2 inch eyes, 7x1 1/2 inch plates. List Price, Each $1.07

Extra Plates. Per Pair ..... $ .15

POLE CAP

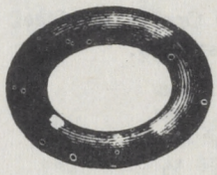


No. 3260—Rolled Steel

Pole Cap and Hold Back made in one piece.

Heavy, 19" long. List Each ..... $ .81

PLOW RINGS

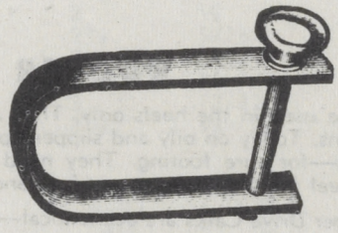


No. 305

Round, steel welded.

5/8x2 1/4 inside. List Each ..... $ .25

STEEL DOUBLETREE CLEVISES



No. 3425

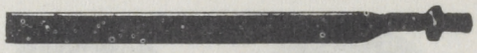
No.	Width Inside	Length Inside to Center	List Each
A	1/4x1	2	$ .41
B	1/4x1	2	.42
C	1/4x1 1/4	2 1/4	.51
D	1/4x1 1/4	2 1/2	.56
E	3/8x1 1/4	3	.68

WHIFFLETREE HALF-STRAP

Wrought Steel

No.	Round	Opening	List Price
3565	1/2"	1 1/2"	$ .20

WAGON BOX STRAP BOLTS



No. 3153—(8 pcs. to set)

Rolled steel, straight pattern.

No.	Size	List Per Set
M	5/8"x12"	$3.13
P	5/8"x14"	3.27
S	5/8"x16"	3.40

WAGON BOX BRACES

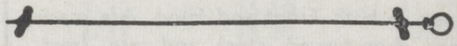


Rolled Steel

No. 3155—(Set of 6 pcs.)

No.	Diameter	Length	List Each
E	1/2"	12"	$1.69
F	1/2"	14"	1.76
B	1/2"	16"	1.81

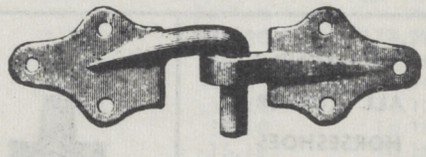
WAGON BOX RODS



Steel Rod with plain nut and washer

No.	Diameter of Rod	Length	List
3103A	3/8"	39"	$ .51
3103H	7/16"	39"	.55
3104A	3/8"	43"	.52
3104H	7/16"	43"	.56

STAKE RACK FASTENERS



No. 5758

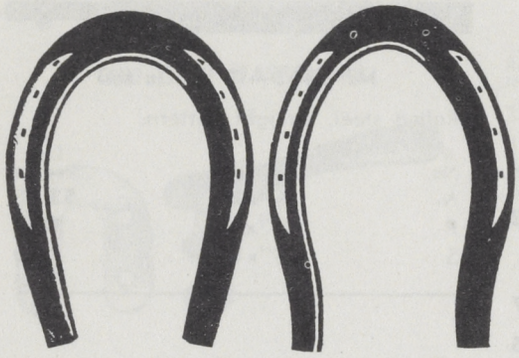
For Loose End, or Side Racks. In pairs Right and Left.

No.	Dia. Ins.		List Per Pce.
A—3" Shank.	9/16	Hooks only	$ .24
B—3" Shank.	11/16	Hooks only	.39
A—6" Shank.	9/16	Hooks only	.32
B—6" Shank.	11/16	Hooks only	.52
A—		Eyes only	.24
B—		Eyes only	.33

HORSE SHOES

How Horse Shoes are Packed

Horse Shoes are packed at the mill in kegs containing 100 lbs. of one size of Shoes, either all Front, all Hind, or assorted Front and Hind. Prices are based on full kegs of one size. When two or more sizes are packed in a keg, or when Shoes are ordered in less than keg lots, an extra charge will be made of 25 cents per 100 lbs. net.



LIGHT IRON

Nos.	1	2	3	4	5	6	7
Front Ozs.	15	17½	21½	24¾	30	36	41
Hind Ozs.	12¼	14¾	18	21¼	25½	29½	34
Net Per 100 lbs.	**$20.00**	**$18.40**	**$17.85**	**$17.85**	**$17.85**	**$17.85**	**$17.85**

MEDIUM IRON

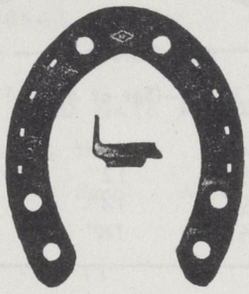
Nos.	3	4	5	6	7	8
Front Ozs.	25	30½	36	43½	50	55
Hind Ozs.	21½	27	31	36	41½	48¼
Net Per 100 lbs.	**$17.85**	**$17.85**	**$17.85**	**$17.85**	**$17.85**	**$17.85**

SNOWSHOE

Nos.	1	2	3	4	5	6	7
Front Ozs.	12	14½	18	22	26	30	35
Hind Ozs.	10	12	15	18	22	26	35
Net Per 100 lbs.	**$20.30**	**$20.00**	**$18.10**	**$18.10**	**$18.10**	**$18.10**	**$18.10**

CHEASED STEEL, TAPPED

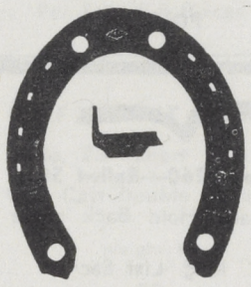
Nos.	2	3	4	5	6	7
Calk Used	7/16	7/16	½	½	9/16	9/16
Net Per 100 lbs.	**$34.15**	**$33.50**	**$32.35**	**$31.70**	**$30.45**	**$30.45**



Draft Pattern

Made in both Front and Hind. Are made from drop-forged steel and are frost-proof.

Size of Shoes	Calk Used	Net Per 100 lbs.
3	½	**$26.00**
4	9/16	**26.00**
5	⅝	**24.50**
6	⅝	**24.00**
7	⅝	**24.00**



Driving Shoe

Made in both Front and Hind. Are made from special Openhearth Steel, are very stiff and frost-proof.

Size of Shoes	Calk Used	Net Per 100 lbs.
2	7/16	**$27.00**
3	½	**27.00**
4	½	**26.00**
5	9/16	**25.00**
6	9/16	**23.70**
7	9/16	**23.70**



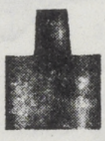
Closed Bar Pattern

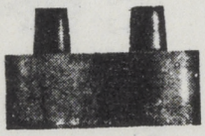
Wide across the quarter, and so shaped that they may be fitted to any foot. Clips turned up and bar welded ready for use. Bar must be heated and peined for frog pressure.

Size of Shoes	Calk Used	Net Per Pair
4	9/16	**$1.70**
5	⅝	**1.90**
6	⅝	**2.05**
7	⅝	**2.30**
8	⅝	**2.40**

DIAMOND ALL RUBBER HORSESHOES

Size of Shoe	Net Per Pair
3	**$2.05**
4	**2.89**
5	**3.07**
6	**3.23**
7	**3.39**
8	**3.56**





RUBBER DRIVE CALKS

To be used in the heels only. They are designed especially to meet modern road conditions. Today on oily and slippery pavements and roads, horses need more than steel calks—for sure footing. They need both steel and rubber. By using rubber instead of steel for heel calks many foot and leg ailments are prevented.

Rubber Drive Calks are economical—they wear longer than steel calks.

When worn out they also can be replaced with removing the shoe from the horse's hoof. They are interchangeable—just as the steel drive calks are.

SINGLE RUBBER DRIVE CALKS

For driving and draft shoes, ⅝" shanks. Net Price, Each ..... **$ .21**

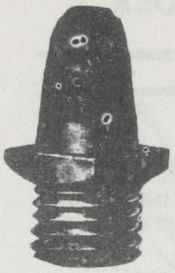
DOUBLE RUBBER DRIVE CALKS

For draft shoes with double heel holes, ⅝" shank. Net Price, Each ..... **$ .39**

WE DO NOT SELL YOUR CUSTOMERS.

HORSE SHOE CALKS

No. 4 Screw Calks



Size Inches	Net Per 100
5/16	$3.61
3/8	3.61
7/16	3.61
1/2	3.61
9/16	3.61
5/8	3.61

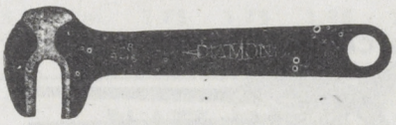
Resetting Shells



These are a distinct advantage to the horse owner because, after numerous sets of standard shank calks have been used on a shoe and the calk holes have become too large for standard shanks, these shells can be used thereby doubling the life of the shoe.

Net per 100 ..... $1.42

Calk Extractors



No.	Size Calk	Net Ea.
1	9/16 & 5/8	$1.00
2	7/16 & 1/2	1.00

Calk Punches

Long Pattern



Sizes	Net Ea.
7/16 & 1/2	$ .65
9/16 & 5/8	.65

Diamalloy Carbide Center Calks

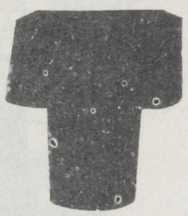


The toughest drive calk ever made. Wears five times longer than ordinary calks. Self-sharpening.

Size Calk	Net Ea.
5/8	$ .55
9/16	.55
1/2	.55



Pad Calk Sharp



Pad Calk Dull



Standard Calk Sharp



Standard Calk Dull

DIAMOND DRIVE CALKS

Each size Diamond Calk is made with standard shank.

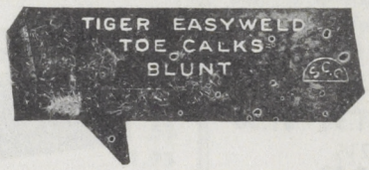
SHARP

Size, Ins.	Net per 100
7/16	$3.33
1/2	3.33

DULL

Size, Ins.	Net per 100
7/16	$3.60
1/2	3.60

TIGER EASYWELD CALKS



Packed in 25-lb. Boxes

Medium Blunt

No.	Length Inches	Height Inches	Top Inches	Bottom Inches	NET PRICE Box Lots	NET PRICE Less Than Box Lots
1	1 1/2	1/2	3/8	9/32	$17.20	$18.20
2	1 3/4	9/16	7/16	11/32	16.20	17.20
3	2	5/8	1/2	13/32	15.10	16.10
4	2 1/4	3/4	1/2	13/32	15.10	16.10
5	2 1/2	13/16	9/16	1/2	15.10	16.10
6	2 3/4	7/8	9/16	17/32	15.10	16.10

Medium Sharp

No.	Length Inches	Height Inches	Width Inches	NET PRICE Box Lots	NET PRICE Less Than Box Lots
1	1 3/4	5/8	7/16	$17.20	$18.20
2	2	3/4	1/2	16.20	17.20
3	2 1/4	7/8	9/16	15.10	16.10
4	2 1/2	15/16	9/16	15.10	16.10
5	2 3/4	1	5/8	15.10	16.10
6	3	1-1/16	5/8	15.10	16.10

Extra Long Blunt

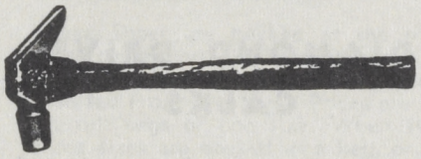
No.	Length Inches	Height Inches	Top Inches	Bottom Inches	NET PRICE Box Lots	NET PRICE Less Than Box Lots
1	2	1/2	3/8	9/32	$18.20	$19.20
2	2 1/4	9/16	7/16	11/32	16.20	17.20
3	2 1/2	5/8	1/2	13/32	15.10	16.10
4	2 3/4	3/4	1/2	13/32	15.10	16.10
5	3	13/32	9/16	1/2	15.10	16.10
6	3 1/4	7/8	9/16	17/32	15.10	16.10

Extra Long Sharp

No.	Length Inches	Height Inches	Width Inches	NET PRICE Box Lots	NET PRICE Less Than Box Lots
1	2 1/4	5/8	7/16	$19.20	$18.20
2	2 1/2	3/4	1/2	17.20	16.20
3	2 3/4	7/8	9/16	16.10	15.10
4	3	15/16	9/16	16.10	15.10
5	3 1/4	1	5/8	16.10	15.10
6	3 1/2	1-1/16	5/8	16.10	15.10

BLACKSMITH SUPPLIES

NO. 50 CHAMPION DRIVING HAMMERS



Weight including handle 18 ozs.
List Price, Each **$3.87**

NO. 12 CHAMPION SHARPENING HAMMERS



Double Bevel Corrugated Pein

Weights including handles: 2, 2¼, 2½, 3 lbs. Each **$5.93**

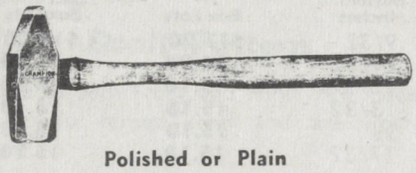
BALL PEIN HAMMERS



Weights including handles.

Lbs.	¼	½	¾	1
List Each	**$1.47**	**$1.47**	**$1.56**	**$1.56**
Lbs.	1½	2	2½	
List Each	**$1.80**	**$2.13**	**$2.33**	

PLOW HAMMERS



Polished or Plain

Weights including handles.
No. 116—2½ lbs. List Each **$1.93**
No. 115—3 lbs. List Each **2.07**

NO. 46 DOUBLE FACE SLEDGE



4 lbs. List per lb. ..... **$ .40**
6 to 12 lbs. List per lb. ..... **.33**

NO. 37 CROSS PEIN SLEDGE



Forged steel polished face.
4 lbs. List per lb. ..... **$ .43**
5 to 14 lbs. List per lb. ..... **.32**

NO. 57 HARDIES



Made of tool steel, black finish.

Shank Inches	¾"	⅞"	1"
List Price, Each	**$1.73**	**$1.93**	**$2.27**

NO. 55 HOT CHISELS



Black finish polished blade. Blade 1½".
List Price **$3.60**

NO. 56 COLD CHISELS



Black finish polished blade. Blade 1½".
List Price **$3.60**

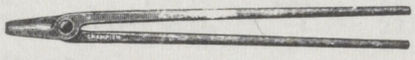
SHOEING TONGS



Drop forged steel, medium weight.
No. 46—

Length, Inches	14	16	20
List Per Pair	**$1.73**	**$1.80**	**$2.08**

STRAIGHT LIP TONGS



Length, Inches	20	22	24
List Per Pair	**$3.00**	**$3.80**	**$3.87**

BOLT TONGS

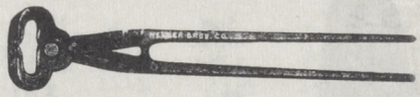


No. 38—

Size Iron, Ins.	½	⅝	¾
Length, Ins.	20	22	22
List Per Pair	**$4.20**	**$4.27**	**$4.27**

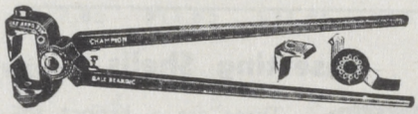
Size Iron, Ins.	⅞	1
Length, Ins.	24	24
List Per Pair	**$4.40**	**$4.40**

WAGNER AND LOW HOOF NIPPER



Length, Inches	14	16
List Each	**$6.27**	**$6.67**

HOOF SHEARS



Ball bearing joints. Knives are inter changeable and are drop forged from tool steel which can be replaced at small cost. The upper knife is called the right, the lower the left. Any looseness or side motion of the joint is easily overcome by simply tightening the nut on joint bolt.

No. 81—Length, Inches 14
List Each **$8.80**
Extra Knives. Per Pair **$2.07**

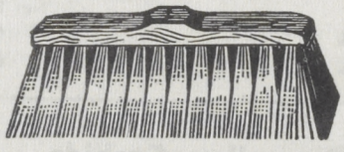
CASTERLIN HOOF NIPPER



Compound Leverage

Oil finished with polished jaws.
No. 82—Length, Inches 13
List Each **$8.46**
Extra Jaws. Per Pair **1.53**

SHOP BROOM



Every broom furnished complete with handle. Made from genuine Bass.
14-inch, 5 Row. List Each **$2.27**

NO. 52 FARRIER'S KNIVES



Adjustable iron handle. Can be supplied with either ⅜, ½, ⅝, or ¾ inch blade.

No. 52—
Complete with one Blade. List Each **$1.60**
Extra Blades, ¼, ⅜, ½, ⅝, and ¾-inch List Each **1.27**

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

BLACKSMITH SUPPLIES

PEERLESS REGULAR HEAD



COLD FORGED HORSE NAILS

The patented process by which these nails are made, produces a neat, light and strong blade. All nails of a size are alike in shape and set. They drive easy and true in the hardest hoof, and will not break under the head or buckle in driving.

Prices shown are net.

Nos.	5	6	7	8
Lgth., Ins.	1-5/16	2⅛	2-5/16	2½
5-lb. Ctns.	**3.00**	**2.65**	**2.00**	**1.80**
25-lb. Box	**14.80**	**13.10**	**10.00**	**8.85**

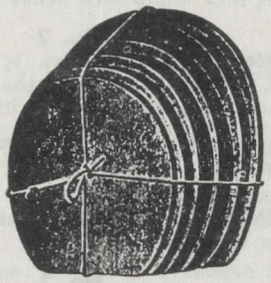
Nos.	9	10	11	12
Lgth., Ins.	2-11/16	2⅞	3	3-3/16
5-lb. Ctn.	**1.75**	**1.75**	**1.95**	**1.95**
25-lb. Box	**8.55**	**8.55**	**9.70**	**9.70**

PLATE NAILS

For race horses. In 1-lb. cartons.

Size, Ins.	Net Per Ctn.
3	**$2.30**
3½	**2.00**
4	**1.35**
4½	**1.00**

SOLE LEATHER PADS



Made from heavy oak-tanned sole leather. They are cut to shape and correspond to size of horse shoe.

Fruin	4	5	6	7
Net Price, Pair	**1.47**	**1.74**	**2.10**	**2.20**

Leather	3	4	5	6
Net Price, Pair	**.59**	**.70**	**.90**	**1.05**

Leather	7	8	9	10
Net Price, Pair	**1.20**	**1.40**	**1.55**	**1.55**

Peat Moss Hoof Stuffing should always be used under these pads.

PEAT MOSS HOOF STUFFING



A medicated petroleum. Will never dry. Unequalled for use under pads. In its use as a stuffing, improves the hoof, causing it to grow and restoring it to its natural condition.

Guaranteed by the manufacturers to prevent corns from growing.

	Net Price
25-lb. Pails. Per lb.	**$ .31**
50-lb. Pails. Per lb.	**.37**
Less than pail lots. Per lb.	**.38**

PINE TAR

Pure Pine Tar for use in packing horses' feet. This Tar has a good weight and is of a high medicinal value whenever used.

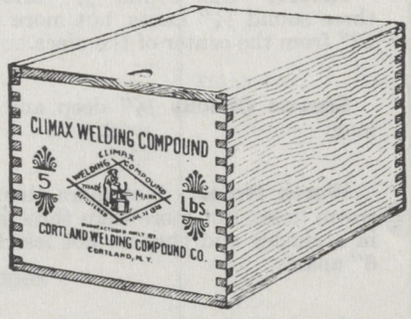
	Net Price
¼ Gal. Can	**$ .53**
1 Gal. Can	**1.95**
5 Gal. Can	**8.82**

OAKUM

Genuine navy quality, hand selected, especially for use in packing horses' feet. Holds in the tar and prevents it from being wasted.

	Net Price
50-lb. Bales. Per lb.	**$ .36**
Less than Bales. Per lb.	**.39½**

WELDING COMPOUND



A compound designed to be applied between the lap. It causes the steel to weld like iron.

Type	Bulk	5-lb. Box	25-lb. Box
Crescent		**$ .17½**	**$ .16½**
E.Z.	**.17**	**.19**	**.18**
Climax		**.23**	**.22**

CORONA WOOL FAT



Corona Wool Fat is a preparation possessing great healing qualities. It is ideal for the home and should be in every medicine cabinet ready for quick use when the many painful accidents occur. There is nothing better for cuts, bruises and painful scalds and burns. Every mechanic and blacksmith should have a tin in his tool box. It is soothing, softening and effective. No offensive odours when you use Corona Wool Fat.

REFINED BORAX

For cleaning grit and scale from the welding iron.

	Net Price
Lump. 100 lbs. Per lb.	**$ .10**
Lump. Less than 100 lbs. Per lb.	**.09**
Granular. 100 lbs. Per lb.	**.07**
Granular. Less than 100 lbs. Per lb.	**.08**
Pulverized. 100 lbs. Per lb.	**.07½**
Pulverized. Less than 100 lbs. Per lb.	**.08½**

TEMPERING POWDER

Tempers at a low heat tools such as taps, dies; etc. Tempers iron to the hardness of steel. Makes mild steel as hard as high carbon or tool steel.

	Net Price
2-lb. Can	**$2.20**

ROYAL SURFACE HARDENING POWDER

	Net Price
1-lb. Can	**$1.58**

FINISHED STANDARD WAGON PARTS

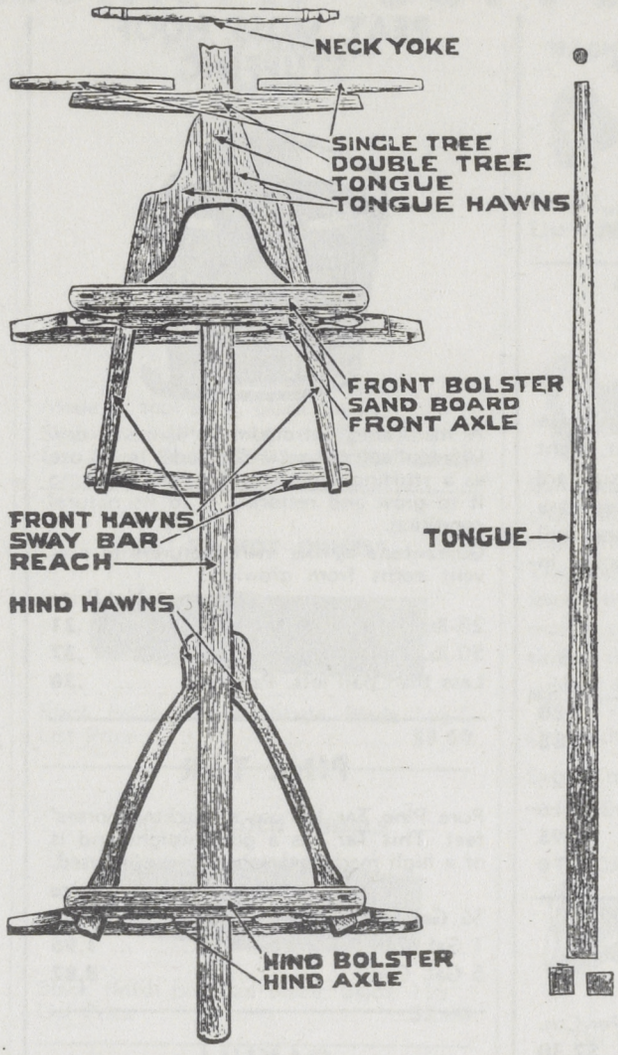
This chart is produced to give a clear view of the wood parts of a wagon gear.

When ordering wagon gear parts study this chart so as to enable you to get the proper name of the article you require.

THIS IS IMPORTANT

It is surprising the amount of goods that are returned to us simply because customers do not order the correct article.

Returned goods are not saleable as No. 1 articles and can only be accepted back at No. 2 price when it is customer's error.



BE CAREFUL IN ORDERING. IT SAVES TIME, EXPENSE AND MISUNDERSTANDINGS.

We reproduce below Extracts from the Official Grading Rules covering vehicle parts. We usually supply a much higher grade than these Rules call for, but, before complaining about quality check against these Rules.

AXLES

Hickory, unless otherwise specified.
Length, 6 feet. Defects at the ends that will be removed in working the piece 5 feet 6 inches long will be admitted.

No. 1

No. 1 shall include all clear and perfect stock and will admit defects as follows:

Knots. Four sound ¼″ knots or two sound ¾″ knots near the center lines of the piece on top or side not more than 12″ from the center or 6″ from the ends of the piece. ¾″ knots must be not less than 12″ apart.

Splits 6″ long in one end or their equivalent in both ends.

Season Checks ½″ deep and 12″ long.

Wormholes and Grubholes. Two pin worm holes not less than 6″ apart. Two grub holes penetrating 6″ at either end of the piece.

Bird Pecks if sound; if unsound must not exceed ½″ in diameter and ¼″ in depth.

Wane must be measured off.

Cross Grain diverging 3″ in the full length of the piece.

No. 2

No. 2 will admit ¾″ sound knots; 1¼″ sound knots not less than 12″ apart, or their equivalent in smaller defects; season checks 1″ deep and 24″ long; end splits not exceeding 8″ in length; cross grain diverging not more than 1″ in 12 inches; 1″ of wane; two grub holes showing on one or two sides, or other defects equivalent to the above.

BOLSTERS AND SANDBOARDS

Oak and Hickory, unless otherwise specified.

No. 1

No. 1 will admit defects as follows:

Knots: One sound ½″ knot or three sound ¼″ knots, not more than 12″ from the center of the piece.

Season Checks ½″ deep and 12″ long.

Worm Holes: Not more than six worm holes, not more than three holes in a cluster and clusters not less than 6″ apart.

Cross Grain diverging 2″ in the length of the piece.

No. 2 will admit ¾″ sound knots; 1¼″ sound knots not less than 12″ apart, or their equivalent in smaller defects; season checks 1″ deep and 24″ long; 1″ of wane; two grub holes showing on one or two sides; or other defects equivalent to the above.

EVENERS, SINGLE TREES, AND NECKYOKES

Hickory, unless otherwise specified.

No. 1

No. 1 shall be free from all defects except season checks ¼″ deep and 12″ long and sound bird pecks.

No. 2

No. 2 will admit two ½″ sound knots not less than 6″ from the center of the piece, or their equivalent in other defects.

REACHES AND POLES

Reaches shall be oak or hickory unless otherwise specified.
Poles shall be oak or ash unless otherwise specified.

No. 1

No. 1 must be straight and free from all defects, except season checks ¼″ deep and 12″ long; six worm holes with not more than three holes in a cluster and clusters not less than 6″ apart; grain crossing in the length of the piece.

No. 2

No. 2 will admit ¾″ sound knots that do not show through the piece; two grub holes showing on bottom or sides; splits 6″ long in one end or the equivalent in both ends; grain crossing in not less than one-third the length of the piece; a vertical or lateral bend diverging not more than 1″ from a straight line the length of the piece, or other defects equivalent to the above.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

WOOD GOODS

HALF-FINISHED WAGON TONGUES



MADE OF SELECTED OAK

Half Finished. Tongues are left square at the Butt and are tapered to point with oval sides.

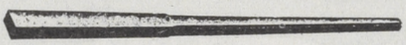
No.	Size Butt Ins.	Length Ft.	List Each
1HF	3¼ x 3¼	12	6.60
1HF	3⅛ x 3⅛	12	6.60
1HF	3¾ x 3¾	12	6.60
1HF	4 x 4	12	6.60

We usually have in stock a limited quantity of Wagon Tongues which although graded by the National Association as No. 1, and bought as such, have in course of manufacture developed minor defects and these we offer as No. 2 grade at a reduced price.

Many of the seeming defects are in appearance only and do not detract from the strength or durability of same.

No.	Size Butt Ins.	Length Ft.	List Each
2HF	3¼ x 3¼	12	5.34
2HF	3⅛ x 3⅛	12	5.34
2HF	3¾ x 3¾	12	5.34
2HF	4 x 4	12	5.34

HALF-FINISHED SLEIGH TONGUES



Half Finished. Tongues are left square at the Butt and are tapered to point with oval sides.

No.	Size Butt Ins.	Length Ft.	List Each
1	2½ x 5	12	6.50
1	3 x 5	12	6.50
1	3 x 6	12	6.50

DRESSED WAGON REACHES



Selected Oak. Dressed Four Sides

Thick Ins.	Width Ins.	Length Ins.	List Each
2	4	10	3.07
2	4	12	3.80
2	4	14	5.07
2	4	16	6.65

WAGON TONGUE HAWNS



HICKORY & OAK SAWN TO SHAPE

Thickness Ins.	Length Ins.	List Each
2	36	2.15

BINDER AND MOWER TONGUES



IN WHITE, PLANED and TAPERED
MADE OF STRAIGHT GRAINED FIR

These Tongues are carried in one size only and can be dressed or cut down to suit any make of binder or mower.

Size Butt Ins.	Length Ft.	List Each
2¾ x 4½	14	5.30

FRONT WAGON HAWNS



HICKORY & OAK SAWN TO SHAPE

Thick Ins.	Length Ins.	List Each
2	48	2.15

HIND WAGON HAWNS



HICKORY & OAK SAWN TO SHAPE

Thick. Ins.	Length Ins.	List Each
2	48	2.15

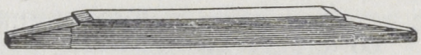
DRESSED WAGON AXLES



MADE OF SELECTED HICKORY

Size	List Each	Size	List Each
3 x 4	4.25	4 x 5	5.10
3½ x 4½	4.25	4½ x 5½	8.25
		5 x 6	8.45

HALF-FINISHED WAGON AXLES



Half finished Wagon Axles to suit standard 4 Ft. 8 in. track are about 5 Ft. 3 ins. in length.

Size Ins.	List Each	Size In.	List Each
3 x 4	5.00	4½ x 5½	9.00
3½ x 4½	5.00	5 x 6	9.25
4 x 5	5.80		

TRUCK AND CABOOSE AXLES



Dressed Square

MADE OF SELECTED HICKORY

Size Ins.	Length Ft.	List Each
4½ x 5½	7	8.00
5 x 6	7	11.00
6 x 6	8	13.50

WAGON SWAY BARS



MADE OF OAK SAWN TO SHAPE

Width Ins.	Depth Ins.	Length Ins.	List Each
2½	2	48	2.00

WAGON BOLSTERS



MADE OF SELECTED OAK
HALF FINISHED

FRONT & HIND

Size Ins.	Length Ft.	List Each
3 x 4	4	2.88
3½ x 4	4	2.88
3½ x 4½	4	2.90
4 x 4	4	2.90
4 x 5	4	3.54
5 x 6	4	4.00
6 x 6	4	4.80

WOOD GOODS

WAGON SAND BOARDS



MADE OF OAK SAWN TO SHAPE

Width Ins.	Depth Ins.	Length Ins.	List Each
3½	4	46	3.40
4	4	46	3.40

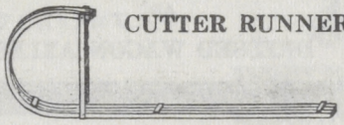
WAGON BOLSTER STAKES



OAK SAWN TO SHAPE

Size: 1 x 3 x 16 Inches Long. List Each 2.10

CUTTER RUNNERS

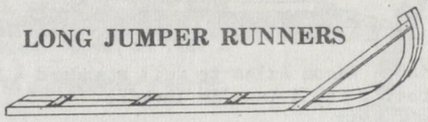


MADE OF SELECTED HICKORY

A pair of Cutter Runners consists of one piece double the width of a single runner. This piece requires to be ripped to make one pair. Height of bend, 2½ feet.

Width Inches:	1	1 1/8	1 1/4
List Per Pair:	6.67	6.67	9.34

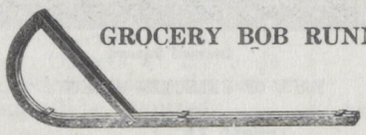
LONG JUMPER RUNNERS



MADE OF SELECTED HICKORY

Depth Ins.	Width Ins.	Length Feet	List Each
1¾	1¼	8	9.68
2	1½	8	10.80

GROCERY BOB RUNNERS



MADE OF SELECTED HICKORY, LENGTH, 6 FT.
GRADE XX
PRICE PER SET OF FOUR RUNNERS

Depth Ins.	Width Ins.	List Per Set
1¾	1¼	10.93
2	1½	11.30
2	2	15.00

SLOOP SLEIGH RUNNERS



MADE OF SELECTED OAK
Height at bend of Nose 12 inches.

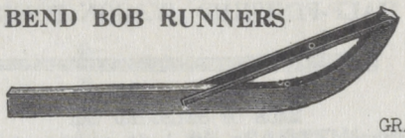
Depth Ins.	Width Ins.	Length Ft.	List Per Set
3	2	7	18.70
5	2	7	26.47
6	2	7	27.15
5	2½	7	31.15
6	2½	7	33.67
6	3	7	41.07
6	3	8	46.15

SAWN SLOOP RUNNERS

MADE OF OAK SAWN TO SHAPE. XX QUALITY

Depth Ins.	Width Ins.	Length Feet	List Per Set
8	3	8	53.34
8	4	8	69.35
10	4	9	80.00

QUICK BEND BOB RUNNERS



GRADE XX

MADE OF SELECTED OAK

In Sets of Four Runners. Quick Bend Runners are higher in the Bend than Sloop Runners and slightly less Bend than Grocery Bob Runners.

Depth Ins.	Width Ins.	Length Ft.	List Per Set
2½	1½	6	16.50
3	2	6	20.20

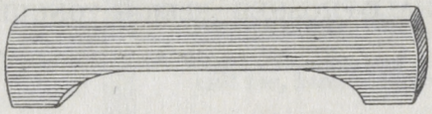
CUTTER AND SLEIGH RAVES



BENT JUMPER RAVES

Size Ins.	Length Ft.	List Per Pair
7/8 x 4	7	8.14
7/8 x 4	9	9.67

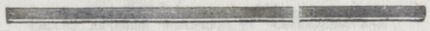
SAWN SLEIGH BENCHES



MADE OF OAK SAWN TO SHAPE

Width Inches;	3½	4	4½	5	6
Depth Inches;	8	8	8	8	8
List Each;	4.20	4.20	4.67	4.68	6.15

BUGGY REACHES



MADE OF SELECTED HICKORY. LENGTH 5 FEET
Dressed Reaches are in the square, not rounded.
Half-finished Reaches are left square at the ends but are rounded most of their length. Illustration shows a dressed Reach

DRESSED REACHES

Size Inches:	¾ x ¾	7/8 x 7/8	7/8 x 1	1 x 1
List Each:	1.00	1.10	1.25	1.40

HALF-FINISHED REACHES

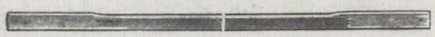
Size Inches:	¾ x ¾	7/8 x 7/8	7/8 x 1	1 x 1
List Each:	1.10	1.20	1.35	1.50

STRAIGHT SLEIGH REACHES

DRESSED FOUR SIDES. Length 3 Feet.

Size:	2 x 4	2 x 5	2½ x 6
List Each:	1.00	1.30	2.20

EXPRESS AND DEMOCRAT REACHES



MADE OF SELECTED HICKORY OR OAK
Illustration Shows a Half-Finished Reach.

Dressed Only	List Each	Half-Finished Only	List Each
1 1/8 x 1 1/8 x 5 ft.	1.35	1 1/8 x 1 1/8 x 5 ft.	1.50
1 1/8 x 1 1/8 x 6 ft.	1.35	1 1/8 x 1 1/8 x 6 ft.	1.50
1 1/4 x 1 1/4 x 6 ft.	1.35	1 1/4 x 1 1/4 x 6 ft.	1.50
1 1/2 x 1 1/2 x 6 ft.	1.35	1 1/2 x 1 1/2 x 6 ft.	1.50

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

WOOD GOODS

SLEIGH ROLLERS



MADE OF OAK
Illustration Shows Roller Tapered, Rounded and Gained

Sizes, Inches:	3½ x 3½	4 x 4
Dressed and Gained, List Each:	2.25	2.45
Tapered Rounded and Gained, List Each:	2.60	2.80

DOUBLE BENT CART SHAFTS

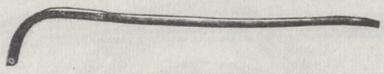


MADE OF SELECTED HICKORY. Half-Finished.

Rounded from front of bar to point and left square in heel. No cross bars. Packed in bundles of four pairs.
GRADE XX

Size Inches: 2¼ List Price per dozen pairs: $228.80

SINGLE BENT CART SHAFTS

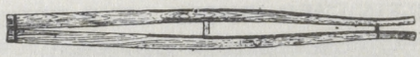


MADE OF SELECTED HICKORY. Half-Finished.

Rounded from front of bar to point and left square in heel. No cross bars. Packed in bundles of three pairs.
GRADE XX

Size Inches: 2¼ List Price per dozen pairs: $175.25
For all odd, right or left, Half-Finished Shafts add 15 per cent to above prices.

SAWN DUMP CART SHAFTS



Depth Inches	Width Inches	List Price Per Pair
4	4	11.00

SHAFTS

DEFINITION OF GRADE X

F.G. or X Grade. Consists of Light Stock in which some defects are allowed. Listed subject to being in Stock.

XX Grade. Suitable for repairs and consists of medium stock free from open defects.

XXX Grade. Heavy weight stock, free from defects and is warrented to be the best average available.

HALF-FIN. BUGGY SHAFTS



MADE OF SELECTED HICKORY
Half-Finished Buggy Shafts are rounded from front of bar to point and are left square in the heel. They are not mortised and cross bars are not included. Height of heel bend 16 inches. Packed in bundles of three pairs.
GRADE XX

Size Inches: 2 List Price per dozen pairs: $104.80

For all Odd, Right or left, Half-Finished Shafts an extra 15 per cent will be charged.

Half-Finished Cutter Shafts take Buggy Shaft List. They are heavier in the heel than Buggy Shafts.

FINISHED BUGGY SHAFTS

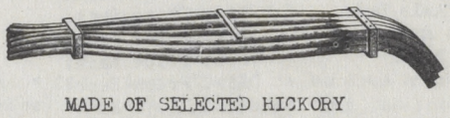


MADE OF SELECTED HICKORY
These Shafts are mortised, the heel is finished and crossbars are included. Height of heel bend, 16 inches. Ready to put together. Packed in bundles of three pairs.

Size Ins.	F.G.	X	XX
1¾ List per dozen pairs:	93.40	97.60	
2 List per dozen pairs:	97.60	104.80	90.40

For Odd, Right or Left, Finished Shafts an extra 25 per cent will be charged.

HALF-FINISHED SINGLE BEND EXPRESS SHAFTS

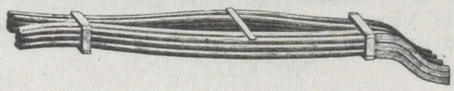


MADE OF SELECTED HICKORY
Rounded from front of bar to point, and left square in the heel. They are eight inches longer than Buggy Shafts.
Cross bars not included. In bundles of three pairs.

Sizes Inches:		2½	3
Grade XX:	List per dozen pairs:	148.80	189.60
XX Straight Heel:	List per dozen pairs:	145.60	187.20

For Odd, Right or Left, Half-Finished Express Shafts an extra 15 per cent will be charged.

HALF-FINISHED DOUBLE BEND EXPRESS SHAFTS

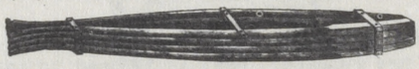


MADE OF SELECTED HICKORY
Rounded from front of bar to point and left square in the heel. Cross bars not included. Packed in bundles of four pairs.
GRADE XX

Size Inches:	2½	3
List per dozen pairs:	190.40	220.80

For all Odd, Right or Left Half-Finished Shafts an extra 15 per cent will be charged.

HALF-FINISHED STRAIGHT HEEL PLATFORM SHAFTS



MADE OF SELECTED HICKORY
Heel 3 feet long, left square, balance of Shaft is tapered and rounded to point. Length 8 feet, 10 inches.
GRADE XX

Depth Inches	Width Inches	List Each
1¾	2½	12.14
2	3	15.60

For Odd, Right or Left, Half-Finished Shafts an extra 15 per cent will be charged.

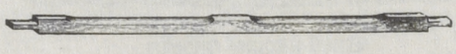
HALF-FIN. SHAFT CROSS BARS



MADE OF SELECTED HICKORY
Shaped and rounded, but not tenoned.

Size Ins:	1 3/8 x 1 3/4	1½ x 2
Grade XX List Price per dozen:	12.80	14.40
Grade X List Price per dozen:	12.80	

FINISHED SHAFT CROSS BARS

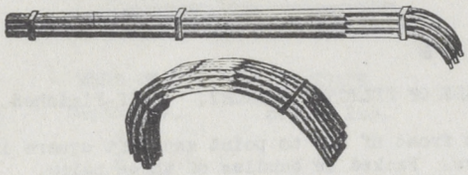


MADE OF SELECTED HICKORY
Shaped, rounded, sanded and tenoned.

Size Ins;	1 3/8 x 1 3/4	1½ x 2
Grade XX List Price per Dozen:	14.40	15.20
Grade X List Price per dozen:	14.40	

WOOD GOODS

FINISHED SINGLE BEND POLES

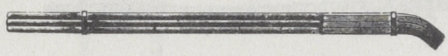


MADE OF SELECTED HICKORY

These poles are rounded. Heel is tenoned to take circle. Furnished with mortised and rounded pole circle. Packed in bundles of 6 poles.

Size Inches:	2½	3
Grade X List Price per dozen:	104.80	149.30
Grade XX List Price per dozen:	116.80	166.30

HALF-FINISHED SINGLE BEND POLES



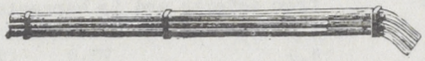
MADE OF SELECTED HICKORY

These poles are rounded from where braces attach to the point. Heel is left square. Packed in bundles of 6 poles.

GRADE XX

Size Ins: 3 List Price per dozen: $149.60

HALF-FINISHED DOUBLE BEND POLES



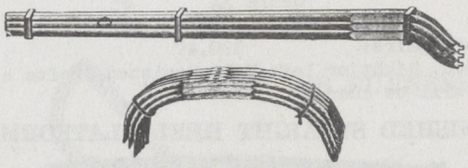
MADE OF SELECTED HICKORY

These Poles are rounded from where braces attach to the point. Heel is left square. Pole circle not included. Packed in bundles of six poles.

GRADE XX

Size Inches:	2½	3
List Price per dozen:	108.00	152.80

FINISHED DOUBLE BEND POLES

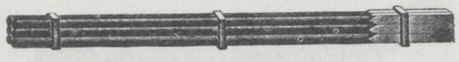


MADE OF SELECTED HICKORY

These poles are rounded. Heel is tenoned to take circle. Furnished with mortised and rounded pole circle. Packed in bundle of six poles.

Size Inches:	2½	3
Grade X List Price per dozen:	108.80	
Grade XX List Price per dozen:	116.80	141.94

HALF-FINISHED STRAIGHT HEEL POLES



MADE OF SELECTED HICKORY

These Poles are squared for 3 feet at the heel. Balance of pole is rounded to the point. Packed in bundles of six poles. DESIGNED FOR PLATFORM GEARS.

GRADE XX

Size Ins:	2¼	2½	2¾	3	3¼	3½
List per dozen:	80.00	80.00	88.00	88.00	104.00	104.00

WAGON NECKYOKE WOODS



MIXED SECOND GROWTH

# 1		# 2	
Size Inches	List Per Doz.	Size Inches	List Per Doz.
2¾ x 42	12.75	2¾ x 42	9.20
3 x 42	12.75	3 x 42	9.20
2¾ x 48	15.70	2¾ x 48	11.40
3 x 48	15.70	3 x 48	11.40

FINISHED POLE CIRCLES



Round Bend Flat Bend

MADE OF SELECTED HICKORY

Finished Pole Circles are rounded and mortised ready to attach to pole. Either round or flat bend.

Size Ins:	1 3/8	1 1/2	1 3/4
List per dozen:	16.00	18.40	23.20

Always specify whether Round or Flat Bend is required, and if Finished Circles state whether for Single or Double Bend Poles.

ROUND END SINGLETREES



MADE OF SELECTED HICKORY. FOR SHAFTS

GRADE XX

Size Ins:	2 x 42	2½ x 40	3 x 40
List per dozen:	11.60	16.80	24.50

FOR POLES



Size Inches:	2 x 36	2 x 42	2½ x 36	2½ x 40
Grade XX. List per doz:	11.60	11.60	16.80	16.80

OVAL WAGON SINGLETREES



MIXED SECOND GROWTH

Size Ins:	2 5/8 x 36	3 x 36	3½ x 36	3½ x 40
List per doz:	9.60	10.40	12.00	12.96

OVAL PLOW SINGLETREES



MIXED SECOND GROWTH

Size Inches:	2½ x 30	3 x 30
List per dozen:	5.70	8.80

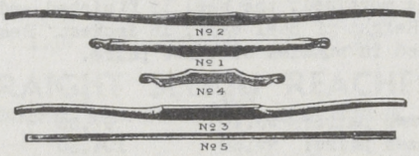
AGRICULTURAL SINGLETREES



MIXED OAK and HICKORY

Size Inches: 2½ x 28. List per dozen: 5.40

BUGGY GEAR WOODS



MADE OF SELECTED HICKORY

Furnished Sawn Only or Finished in the White

No. 1	Spring Bar	List Price Each:	1.40
No. 2	Rear Axle Bed	List Price Each:	1.68
No. 3	Front Axle Bed	List Price Each:	1.68
No. 4	Head Block	List Price Each:	1.34
No. 5	Reach	List Price Each:	.60

CARRIAGE DOUBLETREE WOODS



MADE OF SELECTED HICKORY

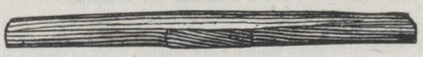
GRADE XX

Size Inches:	2½ x 48	3 x 48
List Price Each:	2.70	3.35

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

WOOD GOODS

WAGON DOUBLETREE WOODS



SHAPED and DRESSED
OAK or HICKORY

Size Ins:	2 x 4 x 48	2 x 4½ x 48	2 x 5 x 48	2 x 6 x 48
List per doz:	14.68	17.34	20.00	25.00

PLOW DOUBLETREE WOODS

MADE OF SELECTED OAK. SHAPED and DRESSED.

Size Inches:	1 7/7 x 3 7/8 x 42	2 x 4 x 34
List per doz:	11.30	8.60

AGRICULTURAL DOUBLETREE WOODS

MADE OF SELECTED OAK. SHAPED and DRESSED.

Size Inches:	1 5/8 x 3 1/2 x 34	2 x 4 x 34
List per doz:	8.60	8.60

THREE AND FIVE HORSE EVENER WOODS



SHAPED and DRESSED. NOT BORED or RIVETTED.
Three Horse

Size:	2 x 5 x 5 ft.
Oak or Hickory. List Price per doz.	24.40

Five Horse
Oak or Hickory

Size:	2 x 7 x 7 Ft.	2½ x 7 x 7 ft.
List Price per Doz:	46.00	88.00

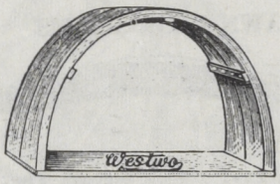
FOUR HORSE EVENER WOODS



SHAPED and DRESSED. NOT BORED or RIVETTED
Four Horse
Oak or Hickory

Size:	2 x 6 x 6 ft.	2½ x 6 x 6 ft.
List per Doz:	36.00	41.36

OAK CART RIMS



Dressed Four Sides Bent True to Shape
In Sets of Four Pieces
NARROW TREAD
GRADE XX

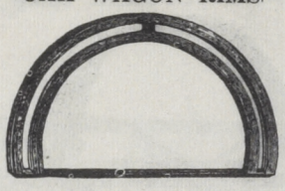
Depth Inches	Tread Inches	List Per Set
2	2	10.15
2	2½	11.60
	BROAD TREAD	
2	3	13.95
2	4	18.47

Stock height: 4 ft. 5 ins. Packed in bundles of one-half set (two pieces) We cannot ship less than one-half set.

IMPORTANT

Lack of space prevented us from listing the full range of Wood Goods we carry in Stock. If your particular requirements are not listed, please do not hesitate to write us for information and prices.

OAK WAGON RIMS

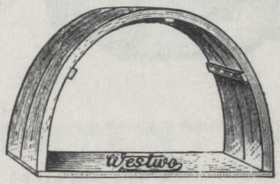


Dressed Four Sides, Bent True to Shape
In Sets of Eight Pieces.
GRADE XX

Depth Inches	Tread Inches	List Per Set
2	2	16.00
2	2½	18.88
2	3	22.40
2	4	29.80

Standard height, Front, 3 ft. 7 ins.
Standard height, Hind, 4 ft. 5 ins.
Packed in bundles of one-half set Front and Hind.
Add 3 per cent for packing in quarter set bundles.
Hind Rims only, will be charged as Cart Rims.

OAK TRUCK RIMS

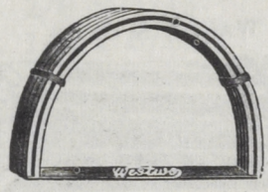


STANDARD HEIGHTS

2 ft. 6 ins.	2 ft. 10 ins.	3 ft. 4 ins.
2 ft. 8 ins.	3 ft. 2 ins.	3 ft. 6 ins.

Depth Inches	Width Inches	List Per Set
2	2	16.00
2	2½	18.88
2	3	22.40
2	4	29.80

CARRIAGE RIMS



MADE OF HICKORY
Dressed Four Sides. Bent True to Shape
In Sets of Eight Pieces
GRADE XX

Depth Ins.	Tread Ins.	List per Set
1¼	1	9.27
1¼	1 1/8	9.27
1 3/8	1 1/4	10.94
1½	1 3/8	12.94
1 5/8	1 1/2	15.34

Packed in bundles of One Set in heights:
3 ft. 2 ins. and 3 ft. 6 ins.
3 ft. 4 ins. and 3 ft. 8 ins.

Also in bundles of Half Sets in heights:

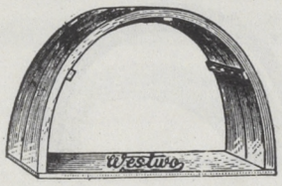
2 ft. 6 ins.	3 ft.	3 ft. 6 ins.
2 ft. 8 ins.	3 ft. 2 ins.	3 ft. 8 ins.
2 ft. 10 ins.	3 ft. 4 ins.	3 ft. 10 ins.

There is an additional charge of 3% for less than one Set or on orders which require packing less than one Set in a bundle.

We cannot supply less than one-half Set of one diameter or, One Set (8 pieces) when two diameters are required.

WOOD GOODS

AGRICULTURAL RIMS

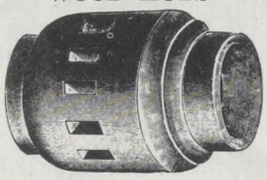


MADE OF MIXED HARDWOOD
For Cultivators, Rakes and seeders
In Sets of Four Pieces

Depth Ins.	Tread Ins.	Height	List Per Set Grade XX	Grade X
1½	2½	3 ft. 10 ins.	8.60	6.94
1½	3	3 ft. 10 ins. or 4 ft.	9.20	8.60
1½	4	3 ft. 10 ins. or 4 ft.	13.34	11.12

For prices of other heights add 10% to above prices.

WOOD HUBS



MADE OF OAK or ELM. FRONT END CUPPED

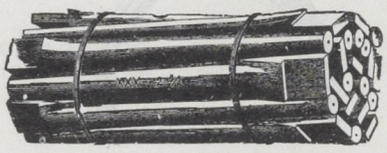
These Hubs are to suit Wood Hub Wheels only and cannot be used on Sarven wheel.

Straight Mortise. Front Hubs are mortised for 12 spokes. Hind Hubs are mortised for 14 spokes. In sets of four hubs.

Dia. at Centre Ins.	Lgth Ins.	For Boxing	List per Set
8½	12	11	16.00
9	13	12	18.68
10	13	12	23.80

NOTE CAREFULLY. Do not ask us to bore hubs for boxings. Hubs detached from wheel cannot be bored for Skein boxings with any certainty that the wheel will run true. Correct Hub Boring must be gauged by the circle of the ring, therefore, the Hub must be incorporated in the wheel before this work can be done correctly.

WAGON SPOKES



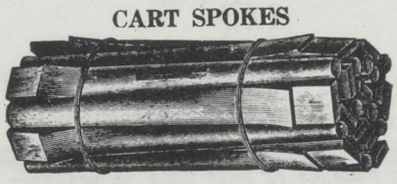
MADE OF SEASONED SOUTHERN OAK
The size is the width at the tenon. In sets of 52 spokes.

Size Ins:	2¼	2 3/8	2½
Grade X List per Set:	17.34	18.40	
Grade XX List per Set:	24.54	25.48	26.68

A set of Wagon Spokes is packed in two bundles. One bundle contains 24 front and the other 28 hind spokes.

When hind spokes only are ordered and shipped they will be charged as cart spokes. See Cart Spoke prices.

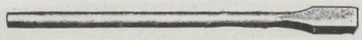
CART SPOKES



MADE OF SEASONED SOUTHERN OAK
The size is the width at the tenon. In sets of 28 spokes.
GRADE XX

Size Ins:	2	2¼	2 3/8	2½
List per Set:	13.60	14.40	14.68	15.34
Size Ins:		2 5/8	2¾	4
List per Set:		21.88	21.88	23.48

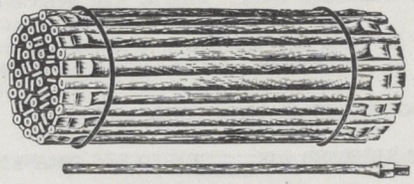
AGRICULTURAL SPOKES



MIXED OAK and HICKORY
For Hay Rakes, Cultivators and Grain Seeders. Packed in bundles of 1 set. 24 spokes in a set.

Size Ins:	1½	1 5/8	1¾	2
List per Set:	8.00	10.08	11.00	12.00

SARVEN PATENT SPOKES



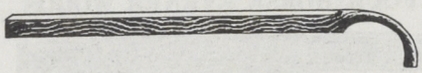
MADE OF SELECTED HICKORY

Packed in bundles of 50 spokes, 64 spokes in a Set. The size is the width at the tenon.

Size Ins.	List Price per 100 Grade Repair	Grade C
1	12.00	14.68
1 1/16	12.00	14.68
1 1/18	12.00	14.68
1 3/16	16.00	17.34
1 1/4	16.00	17.34
1 3/8	19.34	21.34
1 1/2	24.00	26.68

NOTE . . . When ordering specify whether ALL FRONT, ALL HIND, or MIXED FRONT and HIND are required. Unless specified, we will ship mixed front and hind.

No. 10—STRAIGHT HANDLES



Made of Oak. For either right or left side. Suitable for either Right or Left Hand Turning Plows.

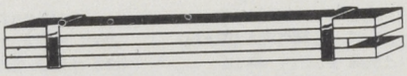
1½ x 2½ x 5 ft. long.	List Price per dozen:	16.00
1⅝ x 2½ x 7 ft. long.	List Price per dozen:	21.34
1¾ x 3¼ x 6 ft. long.	List Price per dozen:	33.60

SAWN PLOW BEAMS



Width Ins.	Depth Ins.	Length Feet	List Each
3	6	6	6.16
3	6	6½	7.20
3	6	7	7.20
3½	6	7	8.27
3½	6½	7	10.50
4	8	8	12.60

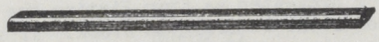
WAGON BOX CROSS BARS



IN SETS OF FOUR PIECES

3 Pieces	1 Piece	List per Set
1 x 3 7/8 x 48 ins.	1 x 3 7/8 x 44 ins.	3.32
1 1/4 x 3 7/8 x 48 ins.	1 1/4 x 3 7/8 x 44 ins.	3.74
1 3/8 x 3 7/8 x 48 ins.	1 3/8 x 3 7/8 x 44 ins.	4.27

WAGON BOX CLEATS



DRESSED AND ROUNDED BUT NOT BORED

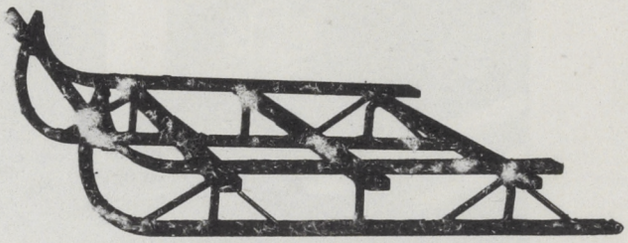
	List per Set
In sets of 8 Pieces: ¾ x 1¾ x 22 ins.	1.50

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

WOOD GOODS

JUMPER GEARS

PREMIER IMPROVED JUMPER GEAR

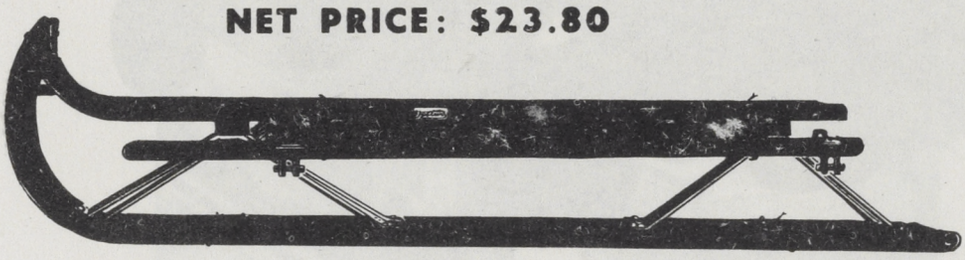


This is a strongly built low-set Gear, specially designed to meet the Western requirement of a safe and comfortable Jumper Sleigh.

This is a three-knee Gear, made throughout of the choicest oak, hickory and steel and upon lines that immediately appeal to the critical. Draft has been given special consideration and is emphasized in the bend of the Runners and the broad bearing of the shoes.

Easy to assemble, only 18 bolts in assembling from the knockdown.

NET PRICE: $23.80

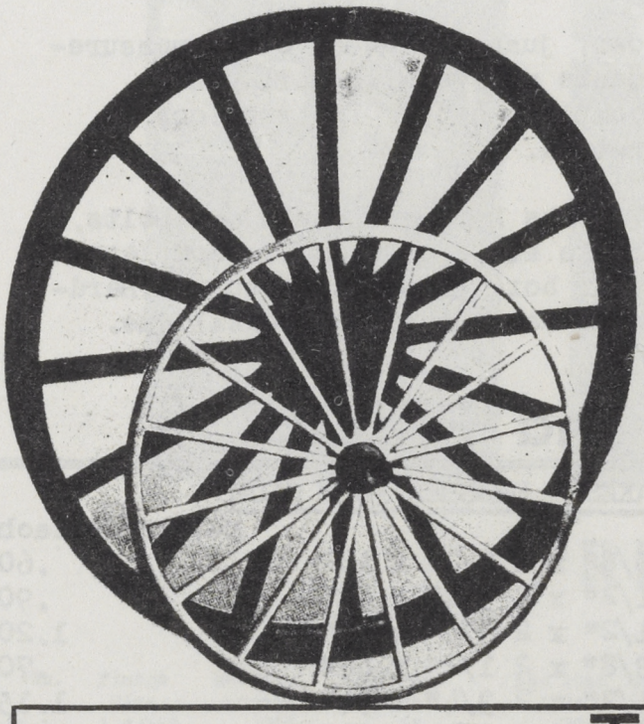


Enlarged Illustration Showing Gear Knocked Down for Shipping

Specifications

Beams	1¼x2½ ins.
Raves	⅞x1¾ ins.
Runners	1⅛x1⅜ ins.
Steel Knees	5/16x1 in.
Steel Shoeing	¼x1¾ ins.
Bolts	5/16 in.
Width of Track	37 ins.
Weight (Knocked Down)	62 lbs.

Painted Red, nicely Striped and Varnished.



SARVEN PATENT WHEELS

COMPLETE WHEEL WITH STEEL TIRING

Prices are for Sets of Four Wheels

Size Wheels	Size Tire Ins.	List Per Set
No. 1	7/8 x 1/4	46.34
No. 3	1 x 1/4	49.20
No. 9	1 1/8 x 5/16	66.60
No. 13	1 1/4 x 3/8	85.60

Other Heights and Sizes of Sarven Wheels can be supplied by direct shipment from the factory.

When Single Wheels are supplied an extra charge will be made.

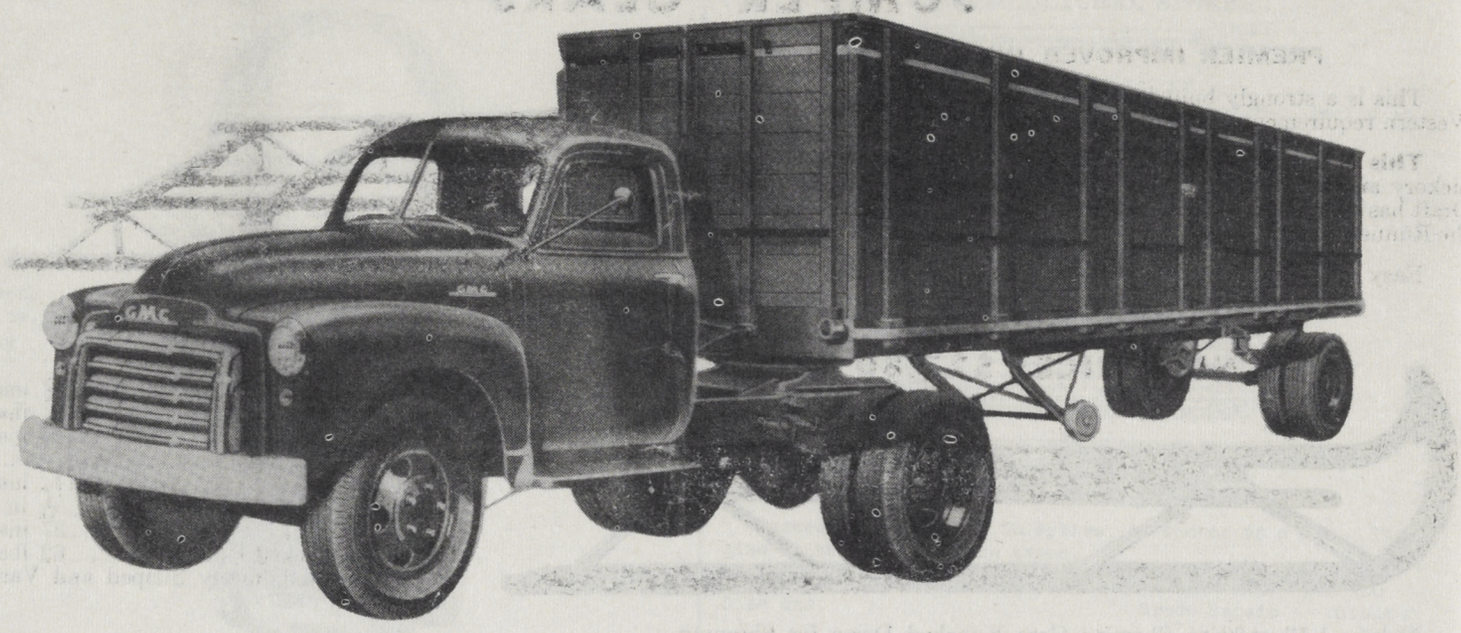
TERMS

NETT 60 DAYS - 2 p.c. 10 DAYS

All Goods are sold F.O.B. Warehouse. All Accounts payable at Winnipeg.
All Claims must be made within Ten Days after receipt of Goods.
All Orders, Contracts and Agreements are contingent upon strikes, fire or delays beyond our control.
When Goods of a Special Size or Kind are made to order and through any cause beyond our control prove not acceptable to Purchaser, we cannot take them back into Stock.
Before returning Goods to us, it is necessary to advise us by mail and receive shipping instructions.

D. ACKLAND & SON, LIMITED.

OAK – TRUCK BOX MATERIAL



We are able to supply you with all materials for building your own Truck or Grain Box. Only the best grade of lumber is used, which will stand lots of rough wear and tear.

If you are interested in obtaining a set of Specification Sheets and Working Drawings for building your own, just let us have the measurements and we will mail you a complete set of Instructions by return.

For the Hardware, such as, bolts, hooks and eyes etc., to complete your box, please turn to the Hardware section of this Catalogue.

SPECIFICATIONS and PRICES

SILLS - DRESSED ONE SIDE

	Net Price Each
2" x 6" x 10'	4.95
2" x 6" x 12'	5.85
2" x 6" x 14'	7.00
2½" x 6" x 12'	8.95

CROSS SILLS - DRESSED 2 SIDES

	Net Price Each
2" x 6" x 7'	3.70
2" x 6" x 8'	4.15
2½" x 6" x 8'	5.40

Ends Tapered .20 Extra.

FLAT GRAIN FIR FLOORING TRUCK SIDES

Grade:- B & Better

	Net Price Each
3/4" x 3 1/4" Face x 12'	1.05
3/4" x 3 1/4" Face x 14'	1.23
3/4" x 3 1/4" Face x 16'	1.41

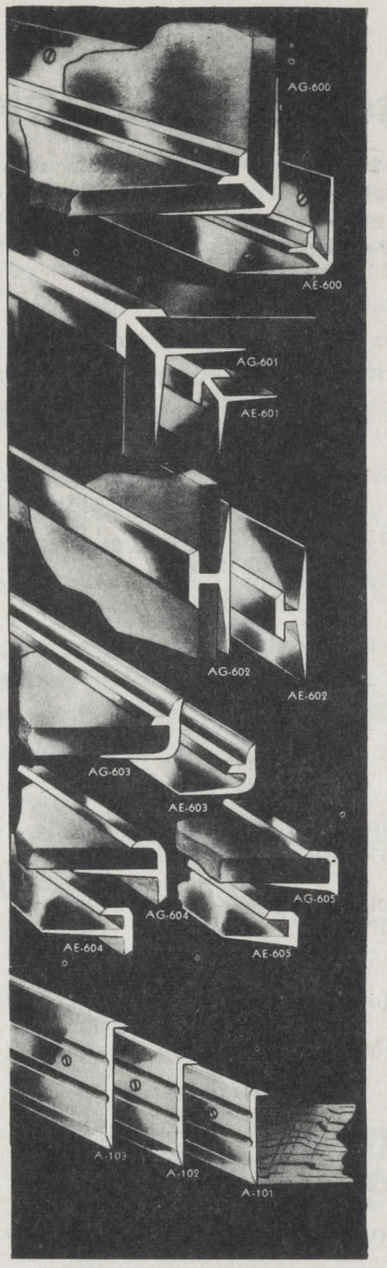
STAKES - DRESSED FOUR SIDES

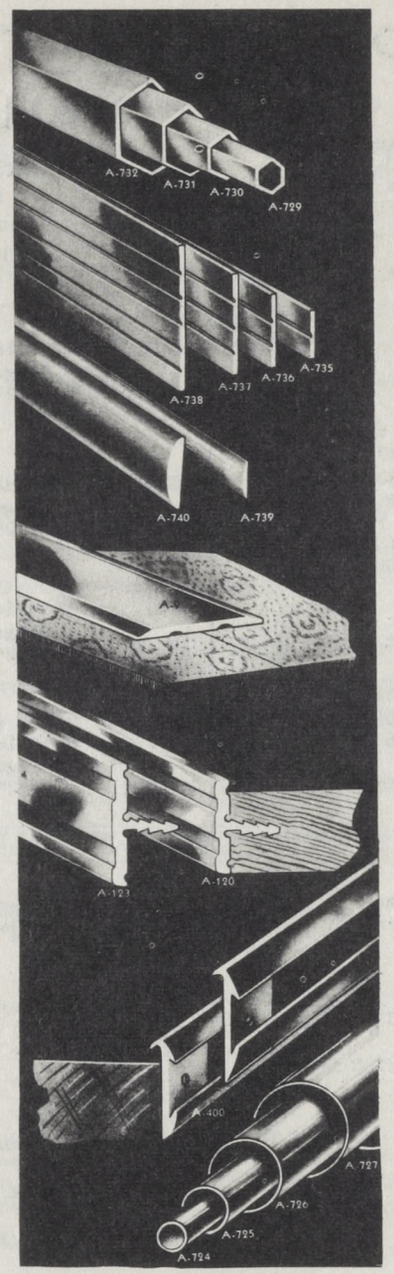
	Net Price Each
1 3/8" x 2 1/2" x 42"	.60
1 1/2" x 2 3/4" x 48"	.90
1 1/2" x 2 3/4" x 60"	1.20
1 3/8" x 2 1/2" x 48"	.70
1 1/2" x 2 3/4" x 54"	1.15
1 1/2" x 2 3/4" x 72"	1.35
1 3/4" x 2 3/4" x 72"	1.35

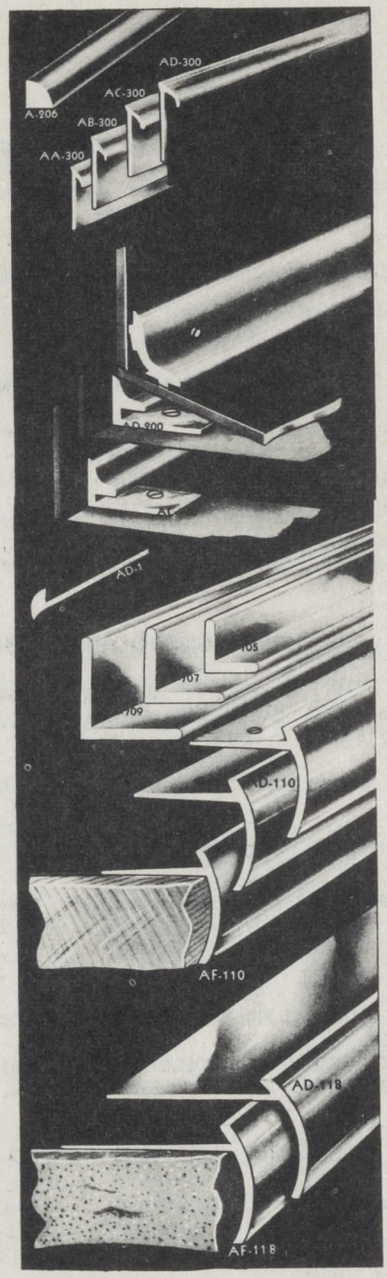
OAK FLOORS - D2S and TONGUE & GROOVE

	Net Price Each
7/8" x 7' x 12'	52.50
1 1/8" x 7' x 12'	57.50
1 1/8" x 8' x 14'	91.50
7/8" x 8' x 12'	60.00
1 1/8" x 8' x 12'	81.00
1 1/8" x 8' x 16'	105.00

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.







PRICE LIST

SINK RIM EDGING

No.	Flange Size	Material Gauge	120' and Over	Less than 120'	Miralite add
AD-1	1 3/16"	.095	.25	.29	.08

THIS EDGING IS AVAILABLE IN 6' 8", 7' 8", 8', 8'6", 10' 2" as WELL AS IN 12' LENGTHS FOR ON THE JOB INSTALLATIONS. HAS MANY OTHER USES, SUCH AS DOORWAY, TABLE AND COUNTER EDGING.

OVERLAP DOORWAY EDGING OR CAP

No.	Overall Size	Material Gauge	120' and Over	Less than 120'	Miralite add
AD-5	1/2"	.095	.17	.21	.08

A LOW PRICED, PROTECTIVE SECTION SUITABLE FOR MANY USES.

CARPET BINDER BAR

No.	Overall Size	120' and Over	Less than 120'	Miralite add
A-9	1 9/32"	.30	.34	.08

FLAT CARPET BINDER BAR.

DRIP-PROOF NOSING

No.	Face	Material Gauge	120' and Over	Less than 120'	Miralite add
A-101	7/8"	any	.22	.26	.08
A-102	1 1/16"	any	.25	.29	.08

UNDERSLUNG PLAIN NOSING

No.	Face	Material Gauge	120' and Over	Less than 120"	Miralite add
AD-105	7/8"	1/8"	.29	.33	.08
AD-106	1 1/16"	1/8"	.31	.35	.08

FEATURING EXTREME TAPERED FLANGE . . . VERY PRACTICAL FOR NEW FELT BASE INLAID. SUITABLE FOR PREFORMED DROP SINK RIMS.

UNDERSLUNG BULL NOSING

No.	Face	Material Gauge	120' and Over	Less than 120'	Miralite add
AD-110	1 1/16"	1/8"	.34	.36	.08

ESPECIALLY DESIGNED FOR STAIR TREADS. ALSO SUITABLE FOR DRAIN BOARDS, SINK TOPS, etc.

PRICE LIST

UNDERSLUNG BULL STAIR NOSING

No.	Face	Material Gauge	120' and Over	Less than 120'	Miralite add
AD-118	1 1/16"	1/8"	.44	.46	.08

MOST SUITABLE FOR CONCRETE TREAD INSTALLATIONS

GROOVED FACE "T" NOSING

No.	Face	Material Gauge	120' and Over	Less than 120'	Miralite add
A-120	1 5/16"	any	.26	.30	.08
A-123	1 1/4"	any	.32	.36	.08

A DOUBLE-GROOVED COUNTER EDGE THAT IS ALWAYS IN DEMAND FOR PRODUCTION WORK. QUICKLY INSTALLED IN A SAW KERF.

UNDERSLUNG GROOVED NOSING

No.	Face	Material Gauge	120' and Over	Less than 120'	Miralite add
AD-140	1 1/16"	.095	.32	.36	.08

A BEAUTIFUL NOSING FOR SINK TOP, TABLE TOP, COUNTERS and BARS

COVE MOULDING

No.	Material Gauge	120' and Over	Less than 120'	Miralite add
AD-200	1/8	.28	.32	.08
A-201	any	.28	.32	.08

AD-200 COVE MOULDING FOR USE BETWEEN DRAINBOARDS AND BACK SPLASH PANELS.
A-201 AN INEXPENSIVE COVE MOULDING FOR INSTALLATION AFTER MATERIAL HAS BEEN APPLIED WITH 5/8" COVERAGE.

EASILY INSTALLED CORNER

No.	Material Gauge	120' and Over	Less than 120'	Miralite add
A-206	any	.15	.19	.08

AN EASILY INSTALLED INSIDE CORNER BEAD.

3/8" APPLIED AFTER COVE

No.	Material Gauge	120' and Over	Less than 120'	Miralite add
A-209	any	.18	.22	.08

CAP TRIMS

No.	Material Gauge	120' and Over	Less than 120'	Miralite add
AD-300	1/8"	.20	.24	.08

A VERY POPULAR GROUP, FEATURING AN EXTREME TAPERED FLANGE, PLUS AN ATTRACTIVE BEVELLED TOP . . . INSURING A SNUG . . TIGHT INSTALLATION.

INSERT TYPE NOSING

No.	Face	Material Gauge	120' and Over	Less than 120'	Miralite add
A-400	1 5/16"	any	.26	.30	.08
A-401	1 1/4"	any	.28	.32	.08

HIGH NONDRIP LIP ESPECIALLY DESIGNED FOR SHORT RADIUS BEND. ADD .04 PER FOOT TO PRICE FOR LINOLEUM INSERTS.

INSERTS

3/8" LINO INSERT .48 per 12 ft. ROLL
1/2" LINO INSERT .60 per 12 ft. ROLL

WALLBOARD SECTIONS

● **EXCELLENT series of mouldings to fit all types of: Linoleum, Wallboard, Wall Tile and Plywood materials. Flanges tapered to fine edges to prevent bulges in covering material.**

INSIDE CORNER

No.	Material Gauge	120' and Over	Less than 120'	Miralite add
AE-600	5/32"	.32	.36	.08

OUTSIDE CORNER

No.	Material Gauge	120' and Over	Less than 120'	Miralite add
AE-601	5/32"	.32	.36	.08

DIVIDER STRIP

No.	Material Gauge	120' and Over	Less than 120'	Miralite add
AE-602	5/32"	.30	.34	.08

CAP TRIM

No.	Material Gauge	120' and Over	Less than 120'	Miralite add
AE-605	5/32"	.23	.27	.08

ANGLES

No.	DIMENSIONS	120' and Over	Less than 120"	Miralite add
A-707	OS. $\frac{3}{4}$"x$\frac{3}{4}$"x 1 1/16"	.28	.32	.08

ROUND TUBING

No.	OD Dimensions	120' and Over	Less than 120'	Miralite add
A-727	1" x 1/16"	.76	.80	.10

HEXAGON TUBING

No.	OD Dimensions	120' and Over	Less than 120'	Miralite add
A-732	1" x 1/16"	.98	1.02	.10

STRONG, USEFUL AND VERY DECORATIVE TUBING WITH 1/16" WALL.

PRICE TAG

No.	Opening	Overall Diams.	120' and Over	Less than 120'	Miralite add
A-733	9/16"	7/8"	.26	.30	.08

ATTRACTIVE SECTION THAT DISPLAYS PRICE TAGS PERMANENTLY AND EFFECTIVELY. SUITABLE FOR 3/4" and 7/8" TAG.

GROOVED FACE PANEL STOCK

No.	Dimensions	120' and Over	Less than 120'	Miralite add
A-736	3/4"	.17	.21	.08

OVAL FACE FLAT BOTTOM STOCK

No.	Dimensions	120' and Over	Less than 120'	Miralite add
A-740	3/4"	.21	.25	.08

A SPLENDID SOLID BEADING FOR DECORATIVE PURPOSES

Preformed Welded Sink Rims

For .095 and 1/8" Gauge - 2", 3" or 4' Radius

No.	Sink Size	Rim Size	List Price
AD-1-802	18 x 24	17 x 23	2.65
AD-1-805	18 x 30	17 x 29	2.85

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

Message to the Welding Trade

The presentation of the welding section of this catalogue to our many friends is a pleasurable occasion for us. We believe that the manufacturers of welding equipment and supplies listed herein, represent the finest in merchandise. We take this opportunity of again expressing our most earnest wish that we both be satisfied. To this end the firm of D. Ackland & Son Limited is a surety that guarantees these welding products to be of the highest quality.

For over 35 years we have been servicing the welding industry in both oxy-acetylene and arc welding. Our constant aim has been to give a complete welding service to our customers. The qualified technicians we employ are trained specifically for this purpose. We invite you to use our service department to assist you in finding a solution to your welding problems.

We again present Smith products to you. It has been our pleasure during our whole association with the welding industry to distribute Smith products in western Canada. Smith's Lifelong warranty is the only warranty of its kind on welding equipment. It is your assurance of getting the best in oxy-acetylene welding equipment.

Welding Torch Bodies, Cutting Assemblies and Cutting Torches bearing the trademark,

SMITH'S LIFELONG GUARANTEE

are guaranteed when used with genuine Smith's parts against normal wear and tear during the lifetime of the registered owner and will be replaced or put in the operating condition of new, at the option of the manufacturer, without cost to the owner, other than transportation.

SMITH WELDING EQUIPMENT CORPORATION
Signed: E. H. SMITH, President

Air Reduction Canada Limited (formerly G. D. Peters) manufacturers of Wilson electrodes and arc welding machines, are pioneers in the arc welding field. Their development and manufacture of the shielded arc electrodes have been a boon to welders all over this continent, and furthermore, they are producing these in Canada for Canadian trade.

We are also able to supply 28 different types of Wilson Stainless Steel electrodes all manufactured in Canada.

Wilson Arc Welding machines are guaranteed by the manufacturer for a period of 12 months, and Warranty adjustments are made by our Welding Department at Winnipeg.

REMEMBER our consideration is to our Customer, assuring you of immediate Service and elimination of possible delays.

SERVICE - DEPENDABILITY - FAIR DEALING

D. ACKLAND & SON Limited

Head Office: WINNIPEG • *Branches:* DAUPHIN, BRANDON, CALGARY AND EDMONTON.

Electrode Selection Chart

FOR MILD STEEL WELDING

GRADE	APPLICATION	A.W.S. No.
Wilson No. 98	D.C. electrode for deep penetration on steel plate, castings, and forgings.	E6010
Wilson No. 530	A.C. equivalent of E6010 electrode. Provides high strength and ductility.	E6011
Wilson No. 109	For general purpose D.C.-A.C. welding of frames, sheet metal and light assemblies.	E6012
Wilson No. 520	For A.C. Welding of sheet, plate, castings. etc. Small diameters for tubing.	E6013
Wilson No. 861	For a finishing pass on multiple pass welds to obtain good appearance.	
Wilson No. 512	For mild steel deposits with low hydrogen content to avoid underbead cracking.	E6016
Wilson No. 106	For horizontal fillets and deep groove welding of X-ray quality.	E6020

FOR LOW ALLOY, HIGH TENSILE STEELS

Wilson Alloyrod A	For all position welding of carbon molybdenum high pressure piping, plate and castings.	E7010
Wilson Alloyrod B	For horizontal fillets and downhand welding of carbon moly plate, shapes and castings.	E7020
Wilson No. 582	For all position welding of Carbon Molybdenum steels such as that used in pressure piping.	E7011
Wilson No. 596	Low hydrogen type electrode for welding 2.5% Nickel Steels.	E7016
Wilson No. 598	For repairing Grade B railroad castings and welding high tensile steels.	E8016
Wilson No. 583	To resist creep and graphitization in chromium stabilized carbon molybdenum steels.	E8011
Wilson No. 593	Welding higher chromium stabilized carbon moly steels and high tensile steels.	E9011
Wilson No. 594	Avoids underbead cracking in welding high tensile steels of high hardenability.	E10010
Wilson No. 597	All position welding of high temperature, high pressure power equipment.	E10016

FOR CARBON STEELS

Wilson No. 17, 17LC	For welding steel to be galvanized, for plug welding and filling in blow holes.	E4510-E4511
Wilson No. 9LC, 9SA	For high tensile welds on locomotive frames, in shipbuilding and steel fabrication.	
Wilson No. 4LC, 4SA	For welding and rebuilding high carbon steel and overlaying mild steel.	
Stoody High Carbon	For building up worn surfaces on carbon and mild steel prior to hard facing.	

FOR ALUMINUM

Wilson No. 50	For the welding of rolled aluminum sheet and castings.	

FOR STAINLESS STEELS

Wilson Stainless Steel	Supplied in a complete range of analysis for A.C. and D.C. welding of stainless steel. Refer to page 306 for further information on Stainless Steel.	

FOR CAST IRON

Wilson No. 575	For machinable welds in cast iron. Can be used in all positions with A.C. or D.C.	
Wilson No. 95	Cast iron core wire electrode for machinable colour matching welds.	
Wilson No. 97	For repairs to cast iron cylinder blocks, heads, machine bases. Not machinable.	

FOR MONEL, NICKEL AND INCONEL

Wilson No. 12SA	For welding monel to monel and monel to nickel.	
140 Monel	For welding monel side of monel-clad steel, overlaying monel on steel.	
131 Nickel	For welding all wrought or cast forms of pure nickel.	
132 Nickel	For welding wrought or cast Inconel (15% Cr.—75% Ni.)	
101 Ni-Resist	Special analysis nickel alloy electrode for welding Ni-Resist castings.	

FOR COPPER, BRASS AND BRONZE

Phos-Trode	All position Phosphor Bronze electrode for welding cast iron, steel, bronze.	
Wilson No. 20, 20SA	For welding copper, brass and bronze and building up bronze bearings, teeth, etc.	
Everdur 1010	Welding and repairing Everdur; carbon arc welding of light tube and sheet.	

FOR ALUMINUM BRONZE

Ampco-Trode 10	For welding like or dissimilar metals, both ferrous and non-ferrous.	
Ampco-Trode 160	For high hardness and tensile strength while still retaining good ductility.	
Ampco-Trode 200	For overlay applications to withstand extreme wear with heavy pressure.	
Ampco-Trode 250	For overlays on forming and drawing dies; won't scratch or gall mating part.	
Ampco-Trode 300	Produces highest hardness obtainable with aluminum bronze; for overlays.	

FOR WELDING MANGANESE & APPLYING MANGANESE OVERLAYS

Timang	For welding manganese castings such as railroad frogs, crossings, shovel teeth, etc.	

FOR HARD FACING

Wilson No. 110	A low priced, alloy coated electrode used to resist wear and abrasion.	
Wilson No. 10SA, 10LC	Work hardening deposit, machinable as welded. For rail ends, gear teeth, etc.	
Wilson No. 588	Work hardening deposit for severe impact and abrasion.	
Stoody Self-Hardening	For impact and abrasion. Can be forged at red heat. For A.C.-D.C. application.	
Stoody Self-Hardening 21	High alloy electrode for severe abrasion and moderate impact.	
A.C.-D.C. Stoodite	For severe abrasion and moderate corrosion resistance. For bearing surfaces, etc.	
A.C.-D.C. Tube Borium	High abrasion resistance; for use on cutting edge of earth working tools.	
A.C.-D.C. Borod	Extremely hard and wear resistant; for facing thin surfaces and applying thin deposits.	
Stoody 1	Heat resistant and non-oxidizing. Used on food processing and chemical equipment.	
Stoody 6	Retains hardness and wear resistance at red heat; for exhaust and steam valves,	

For Welding of Mild Steel
WILSON No. 109

Flat, Vertical or Overhead—Straight Polarity



"MAKE MINE 109"

Meets Requirements of:

A.S.M.E. U-69 and U-70.
Hartford Steam boiler Inspection and Insurance Co.

Approvals:

American Bureau of Shipping, Classification E6012.

Conforms to:

A.W.S. and A.S.T.M. electrode Classification E6012.
C.S.A. Specification W-48-1947 electrode Classification E6012.

GENERAL DESCRIPTION

Wilson No. 109 is a shielded arc, mild steel electrode which has an extruded coating that is unaffected by moisture. It is noted for its excellent appearance, high deposition rate, low spatter loss, exceptionally easy slag removal, and high physical properties. Welds made with this electrode are dense and free from porosity. Its arcing characteristics are well above average and it produces a quick-setting deposit that is ideal for poor fit-up joints and work in the vertical position.

APPLICATION

Wilson No. 109 electrode is designed for general purpose welding on tanks, pressure vessels, pipes, structural steel members, and for an almost unlimited variety of applications where good appearance and ease of application, in all positions, are required. Wilson No. 109 is also very popular for field erection of beams, girts, purlins, roof trusses, etc., and other applications where fit-up is poor and the work is rusty or dirty. Due to its high burn-off rate, which permits the use of high currents, this electrode is widely used for high speed production welding. The deposited bead has an exceptionally smooth and neat appearance which is a decided advantage in the fabrication of retail products such as bicycles, beds, metal furniture, etc. Wilson No. 109 is particularly recommended to shops using both A.C. and D.C. equipment since it will operate equally well on either type of welding machine.

WELDING PROCEDURE

For fastest speeds and best appearance of weld deposit, use straight polarity (electrode negative). Reverse polarity may be used but only with sacrifice in speed and appearance.

On flat, vertical or overhead butt joints, best results are obtained by weaving the electrode from one side of the joint to the other while holding the arc as short as possible without loss of penetration. However, if the width of the joint is over one inch, two overlapping passes per layer should be deposited for best results.

When making fillet or lap welds in a horizontal position, either of two techniques may be used—(1) holding the arc in the crater as weld progresses, or (2) rapid oscillation in the direction of travel. The latter method usually results in a fillet weld of lower convexity ratio.

These current values are recommended:

Electrode Diameter	Amperage		Voltage	
	Min.	Max.	Min.	Max.
3/32"	30	90	17	21
1/8"	90	140	18	22
5/32"	120	200	18	22
3/16"	140	275	20	24
7/32"	170	350	20	24
1/4"	200	425	20	24
5/16"	300	500	22	26

MECHANICAL PROPERTIES

Typical results obtainable from all-weld metal test specimens, as welded:

Tensile Strength, psi.	70,000—80,000
Yield Point, psi.	60,000—70,000
Elongation in 2", %	18—25
Reduction of Area, %	25—35
Impact (Izod), ft.-lb.	30—50
Density (grams per c.c.)	7.80—7.85
Free Bend, %	25—45

SPECIFICATIONS

Electrode Diameter	Average Number of Electrodes per Pound	Standard Electrode Length
3/32"	36	12"
1/8"	18	14"
5/32"	11	14"
3/16"	8	14"
1/4"	3	18"
5/16"	2	18"

Color of Coating--Tan--End Color--None--Spot Color--White

For Welding of Mild Steel

WILSON No. 98 Flat, Vertical and Overhead — Reverse Polarity

Meets Requirements of:

A.S.M.E. U-68, U-69 and U-70.
Hartford Steam Boiler Inspection and Insurance Co.

Approvals:

Lloyds Register of Shipping, Section IV, Paragraph 1-9.
American Bureau of Shipping, Classification E6010.
British Corporation Register of Shipping and Aircraft.

Conforms to:

A.W.S. and A.S.T.M. electrode classification E6010.
C.S.A. Specification W-48-1947 electrode classification E6010.

GENERAL DESCRIPTION

This shielded arc electrode has an extruded cellulose type of coating. All diameters may be used for flat (horizontal) position welding—multiple pass lap, butt or fillet; but only diameters up to and including 3/16" are suitable for vertical and overhead welding. The arc characteristics of Wilson No. 98 electrodes are vigorous and pulsating, resulting in a stray type of arc. The high burn-off rate gives a high deposition rate and fast welding speed. The fact that the deposit solidifies quickly especially adapts these electrodes for welding in the vertical and overhead positions.

APPLICATION

This electrode is designed primarily for the fabrication of mild steel involving plate and rolled sections or castings when quality of deposit is of prime consideration. It is used extensively in the welding of fittings on fired and unfired pressure vessels, storage tanks, structural frames, bridges, pipe lines and all classes of marine work requiring high ductility and tensile strength.

This electrode can also be used to advantage in the welding of many of the low alloy high tensile steels where thin sections are involved (less than ¼" in thickness) because the pick-up of the alloying ingredients from the parent metal will increase the tensile strength of the deposit sufficiently so that it will compare favorably with the base metal, thereby eliminating the necessity of using a more expensive type of electrode. This, of course, only applies where the low alloy material is being used because of its property of high tensile strength. If it is used for other properties such as resistance to creep or corrosion, this recommendation does not apply.

WELDING PROCEDURE

Use only D.C. Reverse polarity (electrode positive). Clean crater before starting another electrode. On multiple pass welding, remove slag before depositing another layer.

Fillet welds in the flat and horizontal positions are to be made with slight manipulation of the electrode which is held at an angle of 45° to each plate. On overhead fillets, the electrode should be held at an angle of 30° or less to the vertical plate. On vertical fillets, the electrode should be held perpendicular to the root of the joint and manipulated upwards to permit "freezing" of the deposit and for best speed and appearance. On butt welds in the horizontal position, stringer beads rather than weave beads are recommended. The angle of the electrode should be varied according to the location of the bead or pass being made. On vertical butt welds, follow the same technique as outlined for vertical fillet welds. On overhead butt welds, first pass should be made in essentially the same way as for vertical fillet welds. Succeeding passes are made by weaving (1¼" maximum weave) across the joint. The technique for lap welds is essentially the same for each position as the technique for fillet welds.

These current values are recommended:

Electrode Diameter	Amperage Min.	Amperage Max.	Voltage Min.	Voltage Max.
3/32"	20	80	18	20
1/8"	90	130	22	26
5/32"	120	160	24	28
3/16"	140	225	25	36
7/32"	170	300	28	38
1/4"	200	350	30	40
5/16"	300	400	32	42
3/8"	400	450	34	44

MECHANICAL PROPERTIES

	As Welded	Stress Relieved
Tensile Strength, psi.	65,000-75,000	63,000-70,000
Yield Point, psi.	55,000-60,000	53,000-58,000
Elongation in 2", %	25-30	27-33
Reduction or Area, %		30-55
Impact (Izod), ft.-lb.	50-70	50-70
Density (grams per c.c.)	7.82-7.86	7.82-7.86
Free Bend, %	20-50	30-60

SPECIFICATIONS

Electrode Diameter	Average Number of Electrodes per Pound	Standard Electrode Length
3/32"	39	12"
1/8"	19	14"
5/32"	12	14"
3/16"	8	14"
1/4"	5	18"
5/16"	2	18"

Color of Coating--Grey--End Color--None--Spot Color--None

For Welding of Mild Steel

WILSON No. 520

All Position—A.C. and D.C. Straight

A.W.S. Classification No. E6013

GENERAL DESCRIPTION

Wilson No. 520 is a shielded arc mild steel electrode having an extruded coating. Excellent slag coverage results in an unusually smooth deposit with easy slag removal. Spatter loss is exceedingly low. Has excellent operating characteristics even when used with A.C. transformers having a low striking voltage. Although especially designed for A.C. welding, this electrode will also operate very satisfactorily on D.C. machines. This electrode is for use on all types of mild steel fabrication where ease of operation on A.C. or D.C. is required. The ductility and tensiles are above A.W.S. Specifications for E6013 class.

WELDING PROCEDURE

For use on D.C. straight polarity, electrode negative, and A.C.

In making vertical butt and fillet joints it is recommended that welding be done from the bottom up. Movement on vertical welds is not as rapid as that used with E6010 types. It is not necessary to raise the electrode as often from the puddle in whipping. On second, third or succeeding passes, a weaving motion directly over the face of the first pass with slight hesitation at corners is all that is necessary. The slag will form outwardly in a large convex shape. This is no cause for alarm as, when it is removed, the bead will prove to be flat and very smooth. It is recommended that a slightly longer arc be used on most applications including downhand fillets, horizontal fillets, vertical butt welds and overhead positions. Passes are usually restricted to ⅛" thickness and width to maintain a constant molten puddle; on extremely wide weaves, up to four times the electrode diameter. This is done by manipulation across the plate.

These current values are recommended:

Electrode Diameter	Amperage Min.	Amperage Max.	Voltage Min.	Voltage Max.
1/8"	70	120	18	22
5/32"	120	200	20	24
3/16"	150	280	22	25
1/4"	225	350	24	28

SPECIFICATIONS

Electrode Diameter	Average Number of Electrodes per Pound	Electrode Length
1/16"	115	9"
5/64"	53	12"
1/8"	18	14"
5/32"	11	14"
3/16"	8	14"
1/4"	5	18"

Color of Coating---Tan---End---None---Spot---Brown

WILSON No. 530

Flat, Vertical or Overhead — Alternating Current

A.W.S. Classification No. E6011

GENERAL DESCRIPTION

Wilson No. 530 electrodes are designed for all position welding for use with alternating current. They are manufactured with an extruded coating, white in color. For the present the available sizes are ⅛", 5/32", 3/16" and ¼". The specially formulated coating produces a spraying type of arc similar in action to that of Wilson No. 98 (E6010). The strong pulsations in this type of arc greatly assist in the performance of vertical and overhead welding. Further, the strong arc force and rapid solidification of the metal facilitate welding in the vertical and overhead positions.

WELDING PROCEDURE

The Wilson No. 530 electrode is designed primarily for use with alternating current under which conditions it produces welds yielding maximum mechanical properties exceeding the requirements of Classification E6011. However, this electrode may also be used in direct current with straight or reverse polarity. The mechanical properties under these conditions will meet the requirements of Classifications E6010 and E6011. The arc action on direct current is of the "digging" type with increased spatter, particularly with straight polarity.

This electrode may be used in all diameters for flat position welding. However, Wilson No. 106 (E6020) is more suitable for single pass horizontal fillet welding and deep groove or positional fillet welding respectively. Vertical and overhead welding are performed, using Sizes ⅛", 5/32" and 3/16".

These current values are recommended:

Electrode Diameter	Amperage Min.	Amperage Max.	Voltage Min.	Voltage Max.
1/8"	80	120	24	26
5/32"	120	160	24	26
3/16"	130	200	28	32
1/4"	200	350	26	30

SPECIFICATIONS

Electrode Diameter	Average Number of Electrodes per Pound	Standard Electrode Length
1/8"	17	14"
5/32"	12	14"
3/16"	8	14"
1/4"	4	18"

Color of Coating---White---End---None---Spot---Blue

FOR PRODUCING LOW HYDROGEN CONTENT WELD METAL MILD STEEL DEPOSIT

WILSON No. 512

AWS Classification E6016

Approvals:

Lloyds Register of Shipping.

American Bureau of Shipping Classification E6016.

Conforms to:

A.W.S. & A.S.T.M. Classification E6016.

Canadian Welding Bureau.

GENERAL DESCRIPTION

Wilson No. 512 is a new type, all position mild steel electrode, designed to produce weld metal possessing not only excellent mechanical properties, but also low hydrogen content. This was accomplished by employing a mild steel core wire with a heavy extruded coating similar to that normally employed on stainless steel electrodes. The arc action is relatively quiet, resulting in low spatter, and the molten steel is not turbulent. Since the coating is heavier than that normally used on all position electrodes, the deposition efficiency is similar to the hot-rod type of electrode and the penetration, though not excessive, is sufficient to reach the corners of the weld. The fluid slag is fairly heavy and dense, gives complete coverage under practically any condition and may be removed with the usual hand tools.

APPLICATION

Since this electrode is relatively new to industry, the full extent of its applications has not been determined. In the light of present knowledge, the principal applications for Wilson No. 512 are: (1) welding hardenable steels where no preheat is used, without the attendant underbead cracking normally experienced when welding with conventional electrodes. (2) Welding high sulphur, free machining steels. (3) Welding cold rolled steels, normally exhibiting excessive porosity when welded with conventional electrodes. (4) Welding low alloy or mild steel when stress relieving would normally be required, but cannot be effected. (5) Weldments to be vitreous enameled after welding. The extremely low hydrogen content of Wilson No. 512 makes possible the production of very satisfactorily enameled surfaces without any heat treatment prior to enameling.

WELDING PROCEDURE

The welding procedure will be similar to that used for stainless steel electrodes. However, Wilson No. 512 will employ slightly higher current settings.

Oscillation should be held to a minimum to prevent the slag from running ahead. This caution also applies to "whipping" when welding in the vertical position.

No attempt should be made to produce small fillets with large diameter electrodes when welding in the vertical or overhead position. In this case it is recommended that a smaller diameter be used, e.g., use 5/32" Wilson No. 512 when a 3/16" mild steel electrode would normally be required.

The shortest possible mechanical length of arc that will permit the maintenance of satisfactory operation should always be used. The following ranges should be satisfactory for most operations.

Electrode Diameter	Amperage Min.	Max.	
1/8"	100	115	All Positions
5/32"	125	180	All Positions
3/16"	160	225	All Positions
1/4"	300	325	Flat Positions Only

MECHANICAL PROPERTIES

The following results were obtained from specimens taken from butt welds made in accordance with the Navy Bureau of Ships Specification 46E8 (INT).

	As Welded	Stress Relieved
Tensile Str., psi.	71,500—72,000	69,250—69,250
Yield Str., psi.	59,500—60,000	55,500—55,500
Elongation in 2" % ...	29.0 —28.0	34.0 —33.0
Reduction of Area % ..	60.0 —64.5	71.5 —67.0

SPECIFICATIONS

Electrode Diameter	Standard Length
1/8"	14"
5/32"	14"
3/16"	14"
1/4"	18"

Color of coating--Light Gray--End Color--White--Spot Color--None

ALLOY STEEL ELECTRODES

FOR WELDING CARBON MOLYBDENUM AND LOW ALLOY, ALLOYROD "A" HIGH TENSILE STEELS

A.W.S. Classification No. E7010

GENERAL DESCRIPTION

Wilson Alloyrod A is a shielded arc electrode having an extruded coating not easily affected by moisture. Welds will have an exceptionally flat face due to the characteristics of the arc which has a spraying action and pulsation, allowing the metal deposited to solidify quickly. Due to these characteristics, vertical and overhead welds can be made with considerable speed.

APPLICATION

These electrodes are designed for use on carbon molybdenum piping that is used in high pressure, high temperature steam service, or on carbon molybdenum structural shapes, plate stock or castings when the molybdenum content does not exceel 0.5%. They may be used on higher tensile carbon steels where the tensile strength desired in the stress-relieved condition does not exceed 70,000 lbs. per sq. in. Satisfactory re-

WELDING PROCEDURE

It should be observed that when welding carbon molybdenum base metal preheating to 300°-600°F. is generally required.

Alloyrod A electrodes are made with essentially the same type of coating employed with Wilson No. 98 except that sufficient molybdenum is added to produce a weld deposit containing a minimum of 0.50% molybdenum. Use D.C. reverse polarity and the same welding techniques given for Wilson No. 98

Color of Coating--Buff--End Color--None--Spot Color--Green

WILSON No. 596

LOW HYDROGEN TYPE ELECTRODE

For Welding 2.5% Nickel Steels

A.W.S. Classification No. E7016

This electrode has a low hydrogen type of coating which gives good operating characteristics in all positions using either A.C. or D.C. reverse polarity. Wilson 596 was designed primarily for welding 2.5% nickel steels which are used where the improved mechanical properties and impact resistance at low temperatures made possible through the addition of nickel are desirable. Such applications would be the fabrication of refrigeration equipment, parts on high altitude aircraft and machinery designed to operate at sub-zero temperatures.

MECHANICAL PROPERTIES

	(As welded)
Tensile Strength, psi	79,850—81,800
Yield Point, psi	64,550—69,050
Elongation in 2"	33.5%—32.5%
Reduction in Area	71.6%—61.7%

CHEMICAL ANALYSIS

The composition of the deposited metal can be affected by arc length and welding conditions; however, a typical analysis of the deposited metal is given below.

Carbon	.10	Sulphur	.023
Manganese	.56	Silicon	.52
Phosphorus	.027	Nickel	2.5

Color of Coating--White--End Color--None--Spot Color--Green

CARBON STEEL

STOODY HIGH CARBON

Stoody High Carbon is a bare type carbon steel electrode used for building up medium and high carbon steel and for building parts up to size prior to hard surfacing. Deposits will contain approximately .45% Carbon and 1.0% manganese. Use D.C. reverse polarity—electrode positive.

Recommended Current Ranges:

Size	Length	Electrodes per Pound	Amperage Min.	Amperage Max.
5/32"	28"	7	110	140
3/16"	28"	5	160	190
1/4"	28"	3	175	220

CAST IRON ELECTRODES

WILSON No. 97

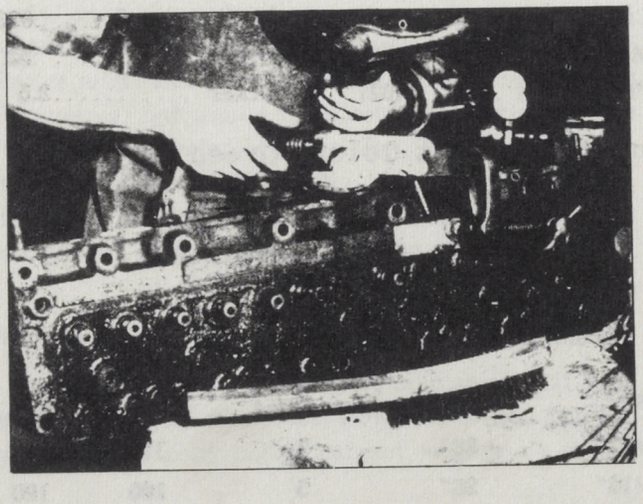
All-Position—D.C.

GENERAL DESCRIPTION

Wilson No. 97 Cast Iron Electrode has a core wire of mild steel with an extruded coating. The pink coating acts as a flux, controls the arcing characteristics and is low enough in melting temperature to allow use of low welding currents so desirable in cast iron welding. The deposits are quite smooth and so uniform in contour as to eliminate any abrupt change in thickness of sections at the line of fusion which is so often encountered when using bare or light coated electrodes. The slag is not bothersome to the welder and can easily be removed.

APPLICATION

This electrode is recommended for the welding of cast iron where machineability of the deposit is not of importance. It is not to be used when the deposit must be machined (See Note) nor should it be used where the deposit is to match the parent metal in color and appearance for, obviously, a deposit of steel cannot match cast iron in appearance. The deposit in all cases is of higher tensile strength than the cast iron. It bonds well and, because it can be applied with comparatively low currents, the hard areas at the fusion zone are materially reduced in cross section. Some of its applications are welding of cylinder blocks and heads, bearing blocks, machine parts and large frames.



WELDING PROCEDURE

For best results, use reverse polarity (electrode positive) with direct current. Do not use straight polarity. Alternating current may also be used. The cast iron to be welded should always be well cleaned. If oil soaked, heating will tend to drive out the oil. Vee out all cracks as well as possible before welding. When no preheating is being used, do not weld continuously. "Skip" welding is recommended wherever possible. In any case, do not deposit a bead over 2 to 3 inches long at any one time. Keep the work cool. Light peening immediately after breaking the arc tends to reduce formation of new cracks or continuance of old ones.

These current values are recommended:

Electrode Diameter	Amperage Min.	Amperage Max.
3/32″	60	95
1/8″	80	110
5/32″	110	150

MECHANICAL PROPERTIES

This electrode will give higher tensile strength and greater ductility than that of the base metal. The weld is machinable only when applied to better grade cast iron, and then at lower tool speeds.

Note: To secure machineable welds on cast iron, electrodes containing comparatively high percentages of nickel should generally be used on the finishing layers or passes.

SPECIFICATIONS

Electrode Diameter	Average Number of Electrodes per Pound	Standard Electrode Length
3/32″	39	12″
1/8″	18	14″
5/32″	11	14″



Color of Coating--Deep Pink--End Color--Orange--Spot Color--None

CAST IRON ELECTRODES

MACHINEABLE
WILSON No. 575

GENERAL DESCRIPTION

Wilson 575 is a shielded arc, nickel base core wire electrode which has been especially developed for the welding of cast iron. It has excellent arcing characteristics, and the arc stability, fluidity, and bead contours obtainable are outstanding. The smooth-flowing characteristics and the inherent ductibility of the deposited metal overcome any tendency toward cracking. Wilson 575 can be used in all positions on either A.C. or D.C. current.

APPLICATION

Wilson 575 electrodes are primarily intended for repairs to damaged or broken castings, building up worn areas, and repairing minor defects in new iron castings. Whatever the application may be this electrode will produce welds in cast iron that are strong, free from cracks and porosity, and machinable. In addition, the colour of welds made with Wilson 575 approaches that of the cast iron parent metal.

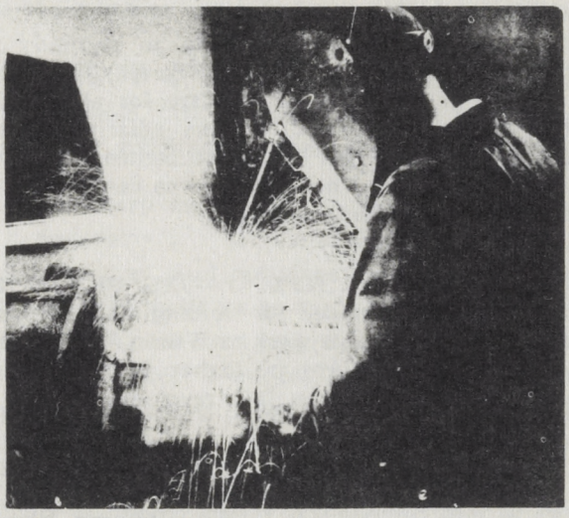
WELDING PROCEDURE

To prepare a casting for welding remove all oil, grease, and dirt from the area to be welded, and take off the casting "skin" which contains sand and other impurities from the mould. If the weld zone is not thoroughly clean, welds are likely to be porous or cracked. Sometimes castings that have been in service are impregnated with oil. Heating to 700°F. is one method of driving off the oil and volatile substances in general. Castings high in gas content--a result of mistakes in foundry practice--can be put into shape by a brief preliminary heating to 1000°F. Preheating is not required when making welds in castings that do not require machining or if the shape or design is such that high stresses are not developed. In cold weather, however, a moderate preheat will avoid too rapid cooling which may lead to hardness in the area adjacent to the weld. With heavy, highly-stressed castings which must meet severe machining requirements, preheats in the neighborhood of 600°F. are desirable.

Wilson 575 electrodes can be used on either A.C. or D.C., but when D.C. is used reverse polarity gives better results than straight. The following current settings are recommended:

Electrode Diameter	D.C. Amperage Min.	D.C. Amperage Max.	A.C. Amperage Min.	A.C. Amperage Max.
3/32"	50	70	60	80
1/8"	80	100	90	110
5/32"	100	120	120	140
3/16"	120	150	130	160

Slag should be completely removed from each pass before starting with subsequent passes. Peening will help to reduce stresses in the welded joint. Use a ball-point tool and apply many moderate blows, rather than a few heavy ones. To retard the cooling rate in heavy castings postheating to approximately 600°F. is recommended. Still another means is to cover the casting with a blanket of heat-insulating material such as asbestos. Where a low preheat has been used, an additional bead laid down along the rim of the weld will, by its annealing effect, reduce hardness at the fusion line between weld and casting.



NI-ROD

GENERAL DESCRIPTION

Ni-Rod is a shielded arc, nickel base core wire electrode which has been especially developed for the welding of cast iron. It has excellent arcing characteristics, and the arc stability, fluidity, and bead contours obtainable are outstanding. The smooth-flowing characteristics and the inherent ductility of the deposited metal overcome any tendency toward cracking. Ni-Rod can be used in all positions on either A.C. or D.C. current.

APPLICATION

Ni-Rod electrodes are primarily intended for repairs to damaged or broken castings, building up worn areas, and repairing minor defects in new iron castings. Whatever the application may be this electrode will produce welds in cast iron that are strong, free from cracks and porosity, and machinable. In addition, the colour of welds made with Ni-Rod approaches that of the cast iron parent metal.

WELDING PROCEDURE

To prepare a casting for welding remove all oil, grease, and dirt from the area to be welded, and take off the casting "skin" which contains sand and other impurities from the mould. If the weld zone is not thoroughly clean, welds are likely to be porous or cracked. Sometimes castings that have been in service are impregnated with oil. Heating to 700°F. is one method of driving off the oil and volatile substances in general. Castings high in gas content--can be put into shape by a brief preliminary heating to 100°F. Preheating is not required when making welds in castings that do not require machining or if the shape or design is such that high stresses are not developed. In cold weather, however, a moderate preheat will avoid too rapid cooling which may lead to hardness in the area adjacent to the weld. With heavy, highly-stressed castings which must meet severe machining requirements, preheats in the neighborhood of 600°F. are desirable.

Ni-Rod electrodes can be used on either A.C. or D.C., but when D.C. is used reverse polarity gives better results than straight. The following current settings are recommended:

Electrode Diameter	D.C. Amperage Min.	D.C. Amperage Max.	A.C. Amperage Min.	A.C. Amperage Max.
1/8"	80	100	90	110
5/32"	100	120	120	140
3/16"	120	150	130	160

Stainless Steel Electrodes

Wilson stainless steel (chromium-nickel) electrodes are manufactured in Canada by Air Reduction Canada Limited in twelve A.I.S.I. types and all grades are available with either the D.C. (lime) or the A.C.-D.C. (titania) type of flux coating. Also available with the D.C. type of coating are five types of straight chrome (Chromium steel) electrodes. Wilson stainless steel electrodes will deposit weld metal having the analysis shown and give a perfect color match with base metal of the same A.I.S.I. type or chemical analysis.

The selection of the type of stainless steel electrode for a particular application depends largely on the type of base metal being welded; as a general rule, an electrode having an analysis comparable to the base metal should be used. Wilson stainless steel electrodes have grade or identification numbers which refer to the A.I.S.I. code number for deposited metal and the Wilson grade number also indicates the type of welding current which may be used. This method of electrode identification greatly simplifies selecting and ordering the correct Wilson electrode for welding any type of stainless steel.

WILSON 308 A.C.-D.C. (19% Cr.—9% Ni.) The titania type coating gives a very smooth arc for all position welding using A.C. or D.C. reverse polarity. Recommended for welding types 301 to 308 inclusive stainless steel sheet, especially when flat bead is desired for appearance and to minimize grinding.

WILSON 309 Cb D.C. (25% Cr.—12% Ni. 1.0% Cb. max.) Columbium stabilized for welding stabilized type 309 stainless and for same work as Wilson 309 D.C., but where service temperatures are higher. Lime type coating for good penetration on D.C. reverse polarity.

WILSON 310 A.C.-D.C. (25% Cr.—20% Ni.) A.S.T.M. classification E310-16. Titania type coating. Use A.C. or D.C. reversed polarity. Same general applications as Wilson 310 D.C. but arc is less forceful and bead has flatter contour.

WILSON 347 A.C.-D.C. (19% Cr.—9% Ni. —.80% Cb.) This columbium stabilized electrode with titania type coating is for all position welding with A.C. or D.C. reversed polarity. Has same applications as Wilson 347 D.C. but slightly less penetration and flat bead makes Wilson 347 A.C.-D.C. especially suitable for single pass welds on type 347 and 321 stainless steel sheet.

WELDING CURRENT GUIDE

Electrode Diameter	Material Thickness	Arc Amperes
1/16"	24 ga.—20 ga.	15— 40
5/64"	22 ga.—16 ga.	30— 50
3/32"	18 ga.—12 ga.	40— 70
1/8"	12 ga.—3/16"	65—100
5/32"	3/16"—1/2"	100—150
3/16"	3/8"—3/4"	130—190
1/4"	3/8"—Up	210—290

We carry other Stainless Steel Electrodes not listed above. Please refer to the "Stainlesssteel Guide" below for further information on electrodes available. If you are interested in a Manufacturer's Catalogue detailing complete instructions on Welding Procedure etc, please do not hesitate to write for one.

WILSON "Stainlesteel" GUIDE

WILSON ELECTRODE	COLOR CODE End	Spot	Coating	CHEMICAL ANALYSIS Cr %	Ni %	C. Max %	Other %
301 DC (16-7)	Yellow	Black	Green	16.0-17.5	7.0- 8.5	.12	
308 DC (19-9)	Yellow	None	Green	18.5-20.5	9.5-11.5	.07	
308 AC-DC (19-9)	Yellow	None	Brown	18.5-20.5	9.5-11.5	.07	
309 DC (25-12)	Black	White	Green	22.0-24.0	12.0-13.5	.10	
309 AC-DC (25-12)	Black	White	Brown	22.0-24.0	12.0-13.5	.10	
309 Cb DC (25-12 Cb)	Black	Blue	Green	22.0-24.0	12.0-13.5	.10	Cb 1.0 max
309 Cb AC-DC (25-12 Cb)	Black	Blue	Brown	22.0-24.0	12.0-13.5	.10	Cb 1.0 max
310 DC (25-20)	Red	None	Green	24.0-26.0	19.0-22.0	.20	
310 AC-DC (25-20)	Red	None	Brown	24.0-26.0	19.0-22.0	.20	
310 Cb DC (25-20 Cb)	Red	Blue	Green	24.0-26.0	19.0-22.0	.20	Cb 1.0 max
310 Mo DC (25-20 Mo)	Red	White	Green	24.0-26.0	19.0-22.0	.20	Mo 2%
316 DC (18-12)	Yellow	White	Green	17.5-19.5	12.0-13.7	.07	Mo 2.5%
316 AC-DC (18-12)	Yellow	White	Brown	17.5-19.5	12.0-13.7	.07	Mo 2.5%
316 Cb DC (18-12 Cb)	Yellow	Green	Green	17.5-19.5	12.0-13.7	.07	Mo 2.5%
316 Cb AC-DC (18-12 Cb)	Yellow	Green	Brown	17.5-19.5	12.0-13.7	.07	Cb .50%
317 DC (18-12-3.5 Mo)	Yellow	Brown	Green	18.5-20.5	13.0-14.5	.06	Mo 3.5%
317 AC-DC (18-12-3.5 Mo)	Yellow	Brown	Brown	18.5-20.5	13.0-14.5	.06	Mo 3.5%
330 DC (15-35)	Green	None	Green	15.0-16.0	35-0-36.0	.15	
347 DC (19/9 Cb)	Yellow	Blue	Green	18.5-20.5	9.5-11.5	.07	Cb .80%
347 AC-DC (19/9 Cb)	Yellow	Blue	Brown	18.5-20.5	9.5-11.5	.07	Cb .80%
410 DC (12 Cr)	Grey	Brown	Green	12.0	—	.10	Mo .50%
430 DC (16 Cr)	Grey	Green	Green	16.0	—	.10	
446 DC (28 Cr)	Grey	Yellow	Green	28.0	—	.10	
502 DC (5 Cr)	Grey	Blue	Green	4.0- 6.0	—	.10	Mo .50%
505 DC (9 Cr)	Grey	White	Green	8.0-10.0	—	.10	Mo 1.50%

Hard Facing Electrodes

TIMANG

FOR HIGH MANGANESE OVERLAYS ON STEEL
ALSO FOR WELDING MANGANESE STEEL

GENERAL DESCRIPTION

Timang nickel manganese electrodes can be furnished either bare or with an extruded coating. The core wire contains approximately 5% nickel and 14% manganese. They will deposit a flat, smooth bead and, when properly applied, there will be no cracks in the surface. The deposited metal will be tough and have a high resistance to wear and impact. Toughness and hardness increase with impact. Brinell hardness ranges from 185 to 200 when applied and increases to 450 (Rockwell C 45) or higher under service.

APPLICATION

For welding and building up parts of manganese steels and castings, or carbon steels and castings, such as on conveying, crushing, grinding, pulverizing, blast furnace, coke plant, rolling mill and excavating equipment; also for use on dredge parts, railroad car castings, crossings, frogs, guard rails, switches, etc., and for surfacing cast iron to provide wear resistance.

Use current values as low as possible, consistent with good penetration. When welding with D.C., use reverse polarity (electrode positive) on either bare or coated type. The coated type only is recommended for A.C. welding.

SURFACING

The surface to be built up should be ground to remove the work-hardened area as well as rust, grease and other foreign matter. Cracks too deep for removal by grinding may be removed by gouging with a cutting torch, care being taken to go below the bottom of the crack.

Each bead should be not more than 3" long, rather wide, applied in a semi-circular motion and not over 3/16" thick. The crater should be kept filled by making and breaking the arc. The beads of each layer should be deposited at right angles to the beads of the preceding layer. Thoroughly clean each layer with a wire brush before depositing a succeeding layer. Peen each bead immediately while hot in order to prevent checking caused by shrinkage stresses. The extent of peening should be such that the deposited metal becomes smooth and shiny. Wear resisting surfaces can also be made on cast iron with these electrodes if this procedure is followed.

WELDING

In making strength welds in manganese steel to carbon steel, or manganese steel to manganese steel, prepare the crack or break before welding by torch cutting, chipping or grinding a "V" clear through. The width of the "V" at top should not exceed the thickness of metal. Scale, dirt, oxide or oil should be thoroughly removed by grinding and wire brushing.

The back-step method of welding is recommended. With preferably a 5/32" electrode in most cases, deposit a layer or bead not more than 2" long. Each 2" step should be built up to the full height of the "V" before starting the next step. Succeeding steps should be made in direct sequence. Peening each layer or bead as soon as it is deposited is necessary to relieve contraction stresses. (Manganese steel contracts ⅛" more per foot than carbon steel and the thermal conductivity is approximately one-seventh that of carbon steel, which indicates that contraction stresses are confined almost entirely to the deposited metal.)

The following current values are recommended:

Electrode Diameter	Amperage Min.	Amperage Max.
1/8"	80	110
5/32"	110	150
3/16"	150	175
1/4"	175	225

SPECIFICATIONS

Electrode Diameter	Standard Electrode Length Coated	Standard Electrode Length Bare
1/8"	14"	18"
5/32"	14"	18"
3/16"	14"	18"
1/4"	14"	18"

Hard Facing Electrodes

WILSON No. 110

FOR RESISTANCE TO SHOCK AND SLIDING ABRASION

All Position

APPLICATION

This electrode is intended for building up steel surfaces to resist shock and abrasion. The deposited metal is air-hardening and possesses considerable toughness, along with relatively high hardness. It is particularly suitable for building up parts subjected to rolling or sliding abrasion rather than repeated impact. The following is a list of typical refacing applications, tabulated as a guide only:

Building up Rail Ends	Grouser Plates
Scraper Blade Skid Shoes	Track Rollers (Steel)
Snow Plow Shoes	Crusher Jaws
Caterpillar Rolls	Crusher Cones
Track Tamping Tools	Raker Bars
Truck Pedestals	Furnace Rams
Tractor Shoe Rails	

Cast Steel Brake Rigging—Ball and Socket Type

Approximate hardness values obtained with deposits on medium carbon steel and ground to a smooth surface are shown below:

	1 Layer	2 Layers	3 Layers
Rockwell C	20-26	35-41	42-48

When shaping or finishing of the deposited metal is necessary, this can only be accomplished by means of a grinding operation since the deposit is not machinable unless it is annealed.

WELDING PROCEDURE

This electrode operates equally well on alternating or direct current. When using direct current, either polarity can be used although for the best results reverse polarity is recommended.

The following current values are recommended:

Electrode Diameter	Average Number of Electrodes per Pound	Voltage Min.	Voltage Max.	Amperage Min.	Amperage Max.
1/8"	15	22	28	125	150
5/32"	10	24	30	150	200
3/16"	7	26	32	175	250
1/4"	4	28	34	200	350

WILSON No. 10 S. A. AND 10 L. C.

FOR A WORK HARDENING DEPOSIT THAT IS MACHINABLE AS WELDED

GENERAL DESCRIPTION

These electrodes are made in two popular coatings, Wilson No. 10 SA (Shielded Arc) for smooth deposits, and Wilson No. 10 LC (Light Coated) for high build up beads. Deposits from both electrodes are soft and machinable in the "as welded" state but work harden rapidly in service to form an extremely tough, durable, wear-resistant surface that stays on no matter what the abuse. Core wire contains not more than .17 carbon and between 4½% and 5¼% nickel. Slag is easily removed.

APPLICATION

These electrodes are particularly recommended for use on equipment that is subject to wear from rolling friction and for all types of hard facing where a machinable deposit is required. Applications include mine car wheels, mine loader wheels, cast steel crusher swing jaws, worn shafting, worn or broken gear teeth (not cast iron), battered rail ends, and numerous road machinery parts.

WELDING PROCEDURE

When welding wheels or rollers either transverse or circumferential beads may be applied. When using transverse beads the wheel should be rotated frequently to spread the heat evenly. Rollers with bearings or bushings should be immersed in water. When welding on circumferential beads, every bead should be started about 6 in. further along the circumference than the start of the previous bead so that weld craters, the weak point of the weld, will not occur in a straight line across the face of the wheel where contraction stresses accumulate.

Sometimes single pass deposits on high carbon steels will be hard to machine due to the carbon pick-up from the base metal. However, subsequent passes will be machinable and the heat from these passes will have a beneficial annealing effect on the fusion zone of the first pass.

Straight or reverse polarity is used, approximately the same amperage as for equivalent diameters of mild steel.

SPECIFICATIONS

WILSON No. 10 SA (Shielded Arc)

Electrode Diameter	Average Number of Electrodes per Pound	Standard Electrode Length
1/8"	19	14"
5/32"	12	14"
3/16"	8	14"
1/4"	5	14"

WILSON No. 10 LC (Light Coated)

Electrode Diameter	Average Number of Electrodes per Pound	Standard Electrode Length
1/8"	20	14"
5/32"	13	14"
3/16"	9	14"
1/4"	5	14"

Wilson No. 110 Color of Coating-Dark Gray-End Color-Brown-Spot Color-Green

Hard Facing Electrodes

WILSON No. 588

FOR HARDFACING DEPOSITS TO RESIST ABRASION AND SEVERE IMPACT

GENERAL DESCRIPTION

This electrode is manufactured by means of the extrusion process, with a gray colored low hydrogen type coating. The electrode bears no identifying color markings since to date no universal specification or color code has been established for electrodes having work-hardening characteristics. It is furnished in 1/8", 5/32", 3/16" and 1/4" diameters, each 14" long.

The coating is sufficiently high in alloy content to give a deposit having a minimum composition of 10% chrome and 1% carbon. After being fused in the arc, the coating gives a dense, brittle, easily removed slag that completely covers the deposit.

Deposits are essentially austenitic but by cold work or slow cooling the deposits are transformed into a very hard, abrasion resistant martensite. Slow cooling transforms the entire deposit into martensite, whereas only the surface is transformed by cold work. As continued wear removes the hard surface, cold work transforms more austenite into martensite, so that there is always a hard abrasion resistant surface on a comparatively soft, ductile sub-surface which absorbs shock and prevents the hard brittle surface from flaking off as it would were the entire deposit hard.

MECHANICAL PROPERTIES

Electrode Diameter	Rockwell C Hardness		
	1 Layer	2 Layers	3 Layers
1/8"	46	45	34
5/32"	43	38	36
3/16"	44	36	31
1/4"	47.	33	29

Single layer deposits, due to dilution from base metal pickup, are harder than the two or three layer deposits. Severe pounding or battering will work-harden the surface of the deposits to approximately 52 Rockwell C.

The welding current, temperature and analysis of the base metal, and welding conditions can materially effect the analysis of the deposited metal. However, a typical chemical analysis of undiluted weld metal shows the following:

Chromium	10.47%	Molybdenum	.53%
Carbon	1.03%	Manganese	.40%

With proper hardfacing technique each pound of electrode will cover an area of approximately 32 square inches to a depth of 1/16".

APPLICATION

These electrodes are especially designed for building up or facing areas requiring abrasion or impact resistance where service conditions are such that the deposit work-hardens. The work-hardening characteristics of the deposits of these electrodes makes them an excellent material for facing manganese steel equipment. Applications for which these electrodes are ideally suited are tabulated as a guide only, since these applications are numerous:

Hammer Mills	Bucket Lips
Dipper Teeth	Roll Crushers
Tractor Grousers	Scarifier Teeth
Crusher Jaws	Gyratory Crushers
Rock Crusher Hammers	Wobblers
Spindles	Coupling Boxes

WELDING PROCEDURE

This all-position electrode operates equally well on either Alternating or Direct Current, reversed polarity. With proper manipulation of the electrode, a thick deposit may be made with a short arc and a uniform, smooth, thin deposit may be made with a long arc.

The current ranges given below are sufficiently broad to cover most applications. However, it should be realized that welding conditions will govern the current employed.

Electrode Diameter	D.C. Amperes	A.C. Amperes
1/8"	80-130	90-140
5/32"	120-170	130-190
3/16"	140-225	160-250
1/4"	225-350	250-385

When using these electrodes a medium long arc will generally produce best results. The arc length best suited for a particular application can be determined readily by a series of brief tests, which consist of burning the electrode at various arc lengths and observing the result of arc length on the deposit. It will be noted that a fine spray type arc with no explosive interruptions in the arc stream may be obtained with a medium long arc. This arc may be easily controlled and directed so that it is possible to apply very thin, smooth, hole-free deposits.

It will be found that slag removal is not necessary to complete wide, weaving beads, since the arc force is sufficient and the nature of the slag is such that the previously deposited slag is easily penetrated and floated to the surface. The speed of travel and current used will be determined largely by the depth of deposit desired and the welding conditions.

For best results the hardfacing procedure employed should be that which will keep the base metal as near a constant temperature as possible. For example, if the application is on the end of a part, facing should be started at the corner and the electrode weaved diagonally across the section at an angle of 45° to 60° with the edge. The result is a system of fairly narrow beads which overlap slightly.

Hard Facing Electrodes

STOODY SELF HARDENING FOR RESISTANCE TO IMPACT

Bare for D.C. Application; Coated for A.C. or D.C. Application

GENERAL DESCRIPTION

A prefabricated electrode of carefully-selected alloys in granular form contained in a tube formed of mild steel strip. When it is applied both steel and alloys are melted, forming hard, wear-resisting, homogeneous deposit of unusual toughness. It is economical, easy to apply and can be forged without loss of hardness or danger of cracking if forging is done at red heat.

APPLICATION

The Stoody Self-Hardening deposit is tougher than most hardfacing overlays and is, therefore, suitable for applications subjected to severe impact and abrasion. Recommended for covering large areas, it is ideal for hardfacing manganese steel and for use where the deposit must be forged.

Common uses include hardfacing and building up worn areas of shovel teeth, manganese steel crushing equipment, wobblers, clutches, spindles, coupling boxes, etc.

WELDING PROCEDURE

Stoody Self-Hardening can be used in all positions and is furnished either bare, for D.C. application, or coated, for D.C. or A.C. application. It is applied with reverse polarity, electrode positive. The general method of applying is similar to that used with mild steel electrodes.

Bare Stoody Self-Hardening is used when working against a copper form or when it is desirable to apply an unusually heavy layer with one pass. For maximum wear resistance, it should not be applied in multiple layers. Depth of deposit should not exceed ¼". If greater thickness is required, a high-carbon build-up rod should be used with an overlay of Stoody Self-Hardening 1/16" to 1/4" thick. A deposit 1/8" to 3/16" thick is most desirable.

Coated Stoody Self-Hardening can be applied in as many as three layers without too much loss of hardness provided high amperage (200 amperes for 3/16" electrode and 250 amperes for 1/4" size) is used. After the third layer, however, hardness drops rapidly with application of each succeeding layer, due to lack of penetration and mixing with the base metal.

These current values are recommended:

Electrode Diameter	Amperage Coated Min.	Coated Max.	Bare Min.	Bare Max.
1/8"	100	150	—	—
3/16"	150	200	150	200
1/4"	200	250	200	250

MECHANICAL PROPERTIES

The Stoody Self-Hardening deposit will range in hardness from **Rockwell C 51 to Rockwell C 55,** depending upon method of application, type of parent metal and thickness of deposit.

STOODY SELF-HARDENING 21 FOR RESISTANCE TO ABRASION

GENERAL DESCRIPTION

Stoody Self-Hardening 21 is a fabricated hard-facing electrode consisting of a steel tube containing accurately measured and mixed granular alloys. Alloys consist of Chromium, Manganese, Silicon, Zirconium, and Carbon. Total alloy content of the rod is 21%. Stoody Self-Hardening 21 is made in both bare and coated form for electric application.

APPLICATION

Stoody Self-Hardening 21 bonds well with all types of ordinary steels as well as manganese steel and cast iron and should be used in downhand position only. Due to its high alloy content this electrode is particularly suited to applications involving severe abrasion and moderate impact such as tractor lugs, tampers, dredge pump casings, bulldozer blades, dipper lips, mullers, crushers, impellers, etc.

MECHANICAL PROPERTIES

Extensive field tests indicate Stoody Self-Hardening 21 offers by far the best wear resistance of any rods in the low-price bracket. Due to its high alloy content deposits are virtually unaffected by cooling rate or subsequent heat treatment. Deposits are not forgeable. Deposit hardness averages—**Rockwell C 55.**

WELDING PROCEDURE

As a bare electrode, Stoody Self-Hardening 21 has very good welding characteristics and will deposit a smooth, dense bead at a very rapid rate. The light graphite type coating helps in giving the electrode excellent arc characteristics with no slag interference or subsequent slag removal problems. The rod will operate equally well on both A.C. and D.C. machines.

Although deposits may show surface checks, in no case will checks result in spalling; and on the jobs suitable for Stoody Self-Hardening 21 checks will not be detrimental. For maximum wear resistance single layer deposits are recommended.

SPECIFICATIONS

Stoody Self-Hardening

Coated	Bare
1/8" x14"	3/16"x14"
3/16"x14"	1/4" x14"
1/4" x14"	

Stoody Self-Hardening 21

Coated	Bare
1/8" x14"	3/16"x28"
5/32"x14"	1/4" x28"
3/16"x14"	3/8" x28"
1/4" x14"	

Hard Facing Electrodes

TUBE BORIUM—FOR SEVERE ABRASION

For A.C. or D.C. Application—Reverse Polarity

GENERAL DESCRIPTION

A fabricated electrode composed of particles of borium (a tungsten carbide) in a tube of mild steel strip. The size of the borium particles depends upon the diameter of the electrode. The electrode has a graphite coating and the borium particles are coated to protect them from the intense heat of the arc. When the Tube Borium is applied, the particles do not melt but are flowed along the surface of the parent metal with the molten steel sheath. When the deposit solidifies, the borium particles are evenly distributed in the deposit, forming an extremely hard surface, heterogeneous in structure. Since the particles of borium embedded in the steel matrix are almost diamond-like in hardness, this material cannot be tested on any standard hardness scale.

WELDING PROCEDURE

Tube Borium can be applied with A.C. or D.C. reverse polarity (electrode positive). Low amperage should be used to minimize dissolving of tungsten carbide particles. The characteristics of the deposit will be the same regardless of whether it is applied as a positive or negative electrode.

The following amperages are recommended for average conditions:

Size of Electrode	Amperage Min.	Amperage Max.
1/8"	80	100
5/32"	100	120
3/16"	120	150
1/4"	150	175

APPLICATION

Tube Borium is recommended for hardfacing all types of equipment which are subjected to severe abrasion. It is especially suitable for hardfacing cutting equipment and equipment requiring a serrated edge. A few of the more common uses include application to rotary drilling bits, power shovel teeth, road rippers, scarifier teeth, bean knives, horseshoes, tire chains, ditcher teeth, bulldozer blades and tips, mill hammers, dredge pump cutters, muller plows, post hole diggers, etc.

A.C.-D.C. BOROD

For A.C. or D.C. Application—Reverse Polarity

APPLICATION

Borod is recommended for hardfacing all types of equipment which is subjected to severe abrasion. Since it can be applied very thinly and with a minimum amount of heat, it is particularly suited for facing thin surfaces as well as parts of equipment requiring thin applications. While the borod particles are extremely brittle, the deposit, if applied thinly, possesses unusual toughness and will withstand impact.

Some of the more common uses include application to plowshares, cane knives, beet rooters, shovel teeth, scarifiers, coal mining machine bits, cultivator discs, hand tools, lathe centers, subsoiler teeth, mixer blades, ensilage cutters, grader blades, etc.

Borod deposits will average well above **Rockwell C 60** hardness.

STOODY—Nos. 1 and 6

Rockwell "C" Hardness: Stoody 6 (41 to 43) Stoody 1 (53 to 55)

FOR RESISTANCE TO HEAT, CORROSION, IMPACT AND ABRASION

APPLICATION

These electrodes are primarily intended for hard facing heavy pieces of equipment that are subjected to heat, corrosion or impact as well as abrasion. They are also used for hard facing intricately shaped parts such as dies. Typical applications include vegetable oil expeller parts, fish oil expeller parts, blast furnace bleeder valves, hot trimming dies, heavy mill guides, stoker screws, heavy hot punches, capstans, heavy blades for cutting scrap, heavy blades for shearing hot steel, blowing engine gas valves and seats, blanking dies, large refractory dies, forming dies, coke oven push shoes, hot clinker conveyor screws, etc.

STOODITE—FOR SEVERE ABRASION

For A.C.-D.C. Application—Reversed Polarity

APPLICATION

Stoodite may be used for hardfacing all parts subject to earth abrasion or metal to metal friction where impact is comparatively light and abrasion is severe.

While not recommended as a corrosion-resistant alloy, the deposit will withstand corrosion better than most steels and Stoodite may be used safely where slight corrosive action is encountered in connection with severe abrasion.

The deposit has a low coefficient of expansion and polishes with use. For this reason, it is particularly suited for bearing surfaces, pump sleeves and other applications requiring smooth, highly polished surfaces.

Being a red hard metal, it has also been used successfully on certain types of hot-working equipment such as flying shears, pinch rolls, etc.

The following suggested applications serve to illustrate the uses for which A.C.-D.C. Stoodite is particularly adapted.

We can supply you with a Manufacturer's catalogue detailing all information on the above electrodes. Please do not hesitate to write for one.

BRONZE ELECTRODES

FOR WELDING BRONZE, BRASS, COPPER, STEEL, CAST IRON AND MALLEABLE IRON IN ALL POSITIONS

PHOS-TRODE

GENERAL DESCRIPTION

Phos-Trode is a heavy coated, shielded arc electrode which produces a soft, spray type arc similar to that obtained with a mild steel electrode. It conforms to A.W.S.-A.S.T.M. Specification ECu-2A and can be used in all positions, flat, vertical and overhead.

WELDING PROCEDURE

This electrode should be used with a D.C. welding machine on Reverse Polarity, electrode positive, work negative. A fairly short arc should be held at all times, but the arc should never be so short that the coating touches the molten puddle. Weave as required. Current should be on the low side of the ranges given for welding malleable, cast iron and steel where a brazing bond with low penetration is desired to eliminate excessive dilution from the base material. For welding the tin bronzes, use currents in the middle of the ranges. In welding the high zinc brasses, currents at the high side of the ranges are recommended. Clean the slag thoroughly from each bead before continuing with subsequent beads, or layers.

Vertical welds should be made by welding from the bottom up. Where joints are tight, use a ⅛" diameter size. For joints with a normal spacing 5/32" diameter electrodes can be used successfully. For overhead welding use only ⅛" diameter electrodes on the initial "root" layer. Stringer beads are recommended in order to keep the molten puddle as small as possible. A wide weave bead is not recommended. 5/32" rods may be used for finish beads where the welds are made in several layers.

Color of Coating--Grey--Holder End Tip--Silver

FOR WELDING BRASS, BRONZE & LIGHT GAUGE COPPER

WILSON No. 20 S.A.
WILSON No. 20 BARE

GENERAL DESCRIPTION

Wilson No. 20 Shielded Arc, Bronze electrode has a heavy extruded coating which provides good arc characteristics . Wilson No. 20 Bare rod has the same core wire as the coated rod and is particularly adapted for use with the carbon arc.

APPLICATION

Both electrodes can be used for the welding of brass, bronze, and light gauge copper. Deposits from these electrodes provide good bearing surfaces and they are widely used for building up worn bronze bearings. Other uses include building up and filling in bronze castings.

WELDING PROCEDURE

For metallic arc welding use reverse polarity. The piece to be welded should be preheated to a point where the electrode will readily penetrate or fuse in with the parent metal when the arc is struck. It is of vital necessity to peen the deposited metal while hot. The best way is to peen after each length of electrode has been deposited and brush off thoroughly with a wire brush. In this way perfect welds may be built up to any practical height. Wilson No. 20 can also be successfully used with the carbon arc on straight polarity.

For best results the following amperage should be used.

Electrode Diameter	Amperage Min.	Max.
1/8"	100	120
5/32"	150	180
3/16"	200	225
1/4"	250	300

EVERDUR 1010

FOR WELDING COPPER, COPPER TO STEEL, GALVANIZED & TINNED STEEL

GENERAL DESCRIPTION

Everdur 1010 welding rod is a copper-silicon alloy which has excellent welding characteristics, and high resistance to many corroding gases and liquids.

WELDING PROCEDURE

Carbon Arc Welding of Everdur sheets, plates and castings is accomplished with a short arc, and joints should be bevelled for best results. A suitable arc welding flux can be prepared using 90% fused borax and 10% sodium fluoride mixed with water-free alcohol. This flux should be painted lightly on rods and work before welding. When used for welding copper this rod should be used in the horizontal position and grooved back-up bars are recommended. In multiple pass work always start succeeding passes away from end of preceding pass to avoid cracking. Relatively high currents and a long arc are required for copper welding. In welding copper and Everdur to steel, flux should be generously applied to rods and the work. On thin sections care must be taken that enough weld metal is deposited to cover the steel under the arc and keep it from being melted. On heavier sections, first coat the steel with about a ⅛" deposit of Everdur and then proceed as in welding Everdur to Everdur. In lining steel vessels thin copper or Everdur sheets are spaced about ¼" apart and tack welded at about 4" to 6" intervals. Plate edges are then welded and finally a third pass is made between the two adjacent edge welds which fuses to each side. Slot welds are preferred to plug welds for joining the sheet to the steel since they will not crack if they are made 1" or more in length. Supplied in 1/16", 3/32", 1/8", 5/32", 3/16" and 1/4" x 36".

Aluminum and Aluminum BRONZE ELECTRODES

WILSON No.50 FOR ALUMINUM WELDING

Flat, Vertical or Overhead—D.C.

GENERAL DESCRIPTION

Wilson No. 50 is a shielded arc electrode with heavy dipped coating. This coating provides a low melting point flux which dissolves the oxides readily, causing them to float to the surface without pitting the weld. Welding with this electrode will not discolor base metal.

APPLICATION

Wilson No. 50 electrodes may be used with very satisfactory results for welding assemblies of aluminum sheets, plates and extrusions of weldable analyses. However, those alloys which achieve high strength and other mechanical properties by heat treatment will be adversely affected as the welding heat destroys the effects of heat treatment adjacent to the weld.

Color of Coating--White--End Color--White--Spot Color--None

AMPCO-TRODE

FOR WELDING ALUMINUM BRONZE, MANGANESE BRONZE AND CAST IRON

Flat or Horizontal—Reversed Polarity

Ampco-Trode 10 is a general purpose aluminum bronze electrode with a shielded arc type of coating, mottled gray in color. Blue color tipping on holder end is used for identification purposes. Sizes available include 1/8" to 3/16" diameters in 14" lengths and 1/4" to 1/2" diameters in 18" lengths.

This electrode is designed to provide deposits having the desirable properties of aluminum bronze, especially its high strength, hot ductility and corrosion resistance.

One of the principal applications for No. 10 is arc welding standard manganese bronze conforming to Federal Specification QQ-B-726b or Navy Specification 49-B-3e, commonly used for marine propellers and fittings, machine parts and general bronze applications where good strength and resistance to corrosion combined with high ductility are the major requirements. Deposits made with No. 10 are superior to standard manganese bronze with respect to corrosion resistance and are equal in strength, hardness and ductility.

Color of Coating--Grey--Holder End Tip--Blue

FOR ALUMINUM BRONZE OVERLAYS TO RESIST SHOCK, IMPACT, WEAR & CORROSION

Ampco-Trode 160—This electrode has a grey coating and is tipped red. It has high ductility and tensile strength combined with good bearing properties. Wherever a bronze electrode is required for fabrication purposes necessitating higher physicals than those obtainable with Ampco-Trode 10, it is specifically recommended that Ampco-Trode 160 be used. This electrode has many properties which make it suitable for bearing service, among them a high resistance to "squashing out". In addition it is resistant to commercial acids and salt water. Average Brinell Hardness is 160.

Ampco-Trode 200—This electrode has a grey coating and is tipped black. It is designed with that analysis of aluminum bronze having the highest hardness and tensile strength possible while still retaining good ductility. This electrode is unsurpassed for bearing overlays where extreme wear is predominant, and in all fabrication involving drastic wearing conditions, especially under heavy pressure. It is also recommended for those applications of corrosion or acid resistant construction where extreme resistance is more important than ductility in the welded joint. Average Brinell Hardness is 200.

Ampco-Trode 250—This electrode has a grey coating and is tipped yellow. It produces a high Brinell Hardness, 250, but has low elongation. Although its yield strength and hardness are higher than that of Ampco-Trode 200, its tensile strength and ductility are lower. These characteristics make this electrode adaptable to those extreme bearing applications having tremendous pressures operating against hardened steel surfaces. A feature of this electrode is its freedom from galling and scuffing the mating part. Typical applications include heavy-duty bushings, bearings, gears, and slides which operate against hardened surfaces.

Ampco-Trode 300—This electrode has a grey coating and is tipped white. It is the hardest of the five Ampco-Trode grades with a Brinell rating of 300. Yield strength is also high but tensile strength is lower than the other grades and ductility is zero. The hardness, bearing properties and wear-resistance which are characteristic of this rod make it ideal for overlaying drawing and forming dies such as are used in forming and drawing carbon or stainless steels. Dies made with this electrode are free from scratching and galling, and die marks are almost completely eliminated.

OXY-ACETYLENE WELDING RODS

MILD STEEL WELDING RODS

DASCO NORWAY IRON

A cleaning flowing Mild Steel welding rod for welds requiring and exceptionally high ductility with good strength for fabrication and repair of mild steel parts.
Sizes: 1/16, 3/32, 1/8, 3/16, 1/4.

HIGH CARBON RODS

DASCO CRUSCA SIMPLEX

For welding where ductility and high tensile strength is required for medium, high carbon, and alloy steels.
Sizes: 3/32, 1/8, 3/16, 1/4.

DASCO CAST IRON

For welding grey cast iron of all kinds. It deposits a fine grain weld metal as strong as a casting, and is easily machined.
Sizes: 1/8, 3/16, 1/4.

BRONZE WELDING RODS

DASCO BARE BRONZE

A very low fuming high tensile strength Bronze rod giving a very high quality deposit. It melts rapidly, flows freely, tins easily and solidifies quickly.
Sizes: 3/32, 1/8, 3/16, 1/5
Sizes: 3/32, 1/8, 3/16, 1/4.

DASCO COATED BRONZE

A flux coated, very low fuming bronze for high strength, high ductility and resistance to wear. Pre-heating assures using exactly the right amount of flux and speeds up welding since the operator can give his undivided attention to depositing the rod metal without stopping to dip the hot rod in the flux can.
Sizes: 3/32, 1/8, 3/16, 1/4.

ALUMINUM WELDING RODS

DASCO NO. 50

Flux coated for sheet and cast aluminum. This rod has a low melting point which contracts very little during solidification.
Sizes: 3/32, 1/8, 5/32, 3/16.

HARD FACING RODS

STOODY SELF HARDENING BARE

A hard facing weld rod used on equipment which is subjected to impact and abrasion.
Sizes: 1/8, 3/16, 1/4.

TUBE BORIUM BARE

For hard facing all types of equipment subjected to abrasion, in combination with corrosion, heat and impact.
Sizes: 1/8, 3/16, 1/4.

BARE STOODY

For all types of severe wear caused by sliding friction.
Sizes: 1/8, 3/16.

BOROD BARE

For all types of equipment where severest earth working, drilling or scraping conditions exist.
Sizes: 1/8, 5/32. 3/16.

WHITE METAL WELDING RODS

ALLADIN RODS

For welding of white metal, brazing and soldering of aluminum.
Sizes: 1/16, 1/8, 3/16, 1/4.

SILVER SOLDER

EASY FLO 35

An easy flowing silver solder which will make strong joints on small parts--both ferrous and non-ferrous: Melting point 1125 degrees F. Flow point 1295 degrees F.

EASY FLO 45

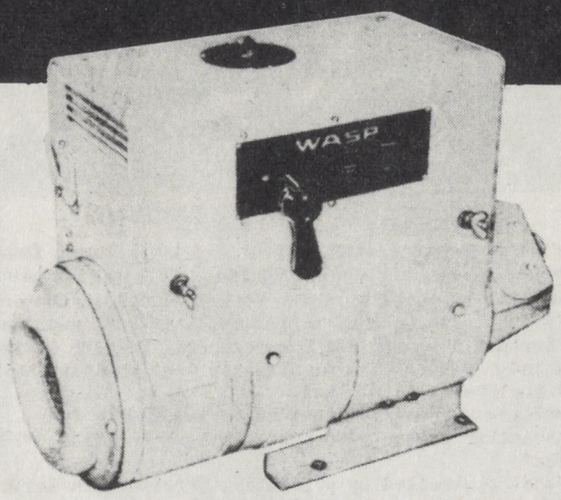
Low melting point for joining ferrous and non-ferrous metals and alloys. Melting point 1125 degrees F. Flow point 1145 degrees F.

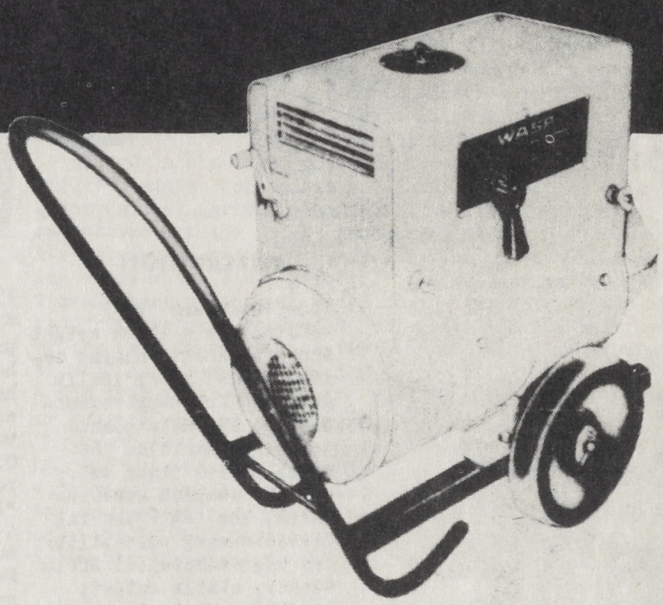
SILFOS

Alloy of copper silver and phosphorus for joining copper and copper base alloys, where a more ductile joint is required. Melting point 1185 degrees F. Flow point 1300 degrees F.

150 and 200 AMPERE "WASP" ARC WELDERS

WILSON





150 AMPERE
WILSON ARC WELDER MODEL GA 150

The 150 ampere "Wasp" Welder (Model GA 150) is designed for handling work below the range of the standard 200 ampere welder. This 150 ampere machine, however, has a wide range, making it adaptable not only for the average light material and very light work, but also for heavier work not exceeding 200 amperes. It is of unusually compact construction, requiring only 2½ square feet of floor space.

Price $387.00
Accessories 35.00
F.O.B. Winnipeg

200 AMPERE
WILSON ARC WELDER MODEL GA 200

The 200 ampere "Wasp" Welder (Model GA 200) meets the demand for a welder of larger capacity than the 150 ampere. Yet with a range of from 25 to 250 amperes it will perform equally well on thin sheets and on heavy plates and castings. It can be used up to its 250 ampere range on manual arc welding without any possible harm to the machine.

Price $444.00
Accessories 45.00
F.O.B. Winnipeg

DISTINCTIVE FEATURES OF WILSON WELDERS

Dual control is used. By means of a selector switch the entire range of the welding current is broken into three steps in the 150 ampere welder, and into four steps in the 200 ampere welder. Fine adjustment is provided by a field rheostat having a calibrated dial.

Polarity is changed from straight to reverse, or vice-versa, merely by interchanging the electrode and ground cables at the terminals, which are marked for polarity.

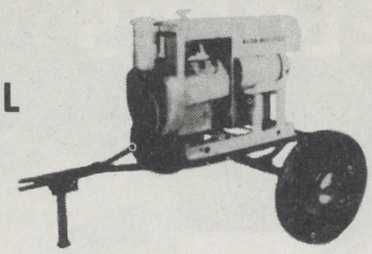
The electrical efficiency of either unit is high compared to similar size units of other designs. Excellent commutation at all settings, plus the advantages of self-excitation and split-pole cross-field design, furnish a smooth flow of welding current at all settings, from minimum to maximum.

Excellent ventilation makes possible unusual capacity and cool performance. Being a horizontal machine, the dynamically balanced armature is carried on two sealed ball bearings. This insures long, trouble-free service. These bearings require only occasional greasing.

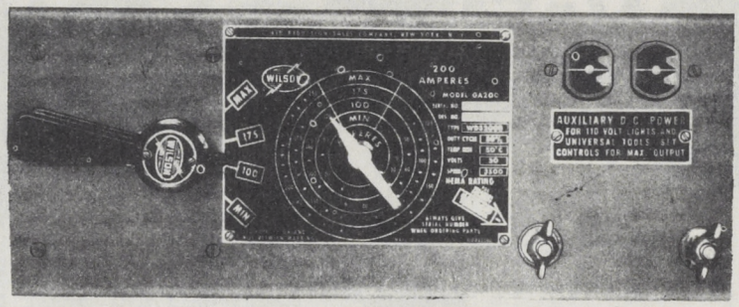
WILSON GAS DRIVEN ARC WELDERS

200 AMPERE WILSON WASP SPECIAL

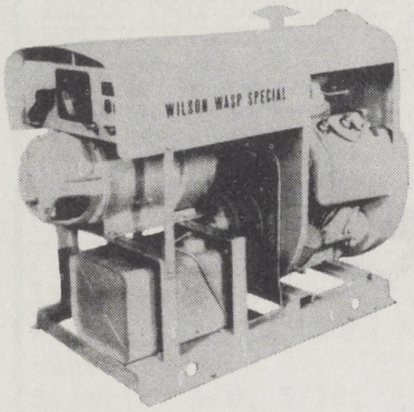
IT'S PORTABLE



DISTINCTIVE FEATURES



DESCRIPTION



PRICE $906.00
ACCESSORIES $45.00
F.O.B. WINNIPEG

The 200 Ampere "WASP SPECIAL" is a light weight easy-to-handle, engine driven welder specifically designed for tough construction and maintenance jobs in the field. Because of its light weight and compact construction, the "WASP SPECIAL" provides easy portability The high electrical efficiency, stable output, and wide range of current settings of the self-contained two bearings GA 200 Wasp generator assures high quality welds.
It will perform equally well on thin sheets and on heavy plates and castings.

Power for driving the generator is provided by a rugged four cylinder Wisconsin VF-4 air-cooled engine. This engine has proven its ability to stand up under peak load conditions and heavy duty factor loads in many varied applications, such as on harvestors, irrigation-pumps and compressors. Because it is air-cooled a large part of the maintenance cost entailed with water-cooled engines is eliminated.
Control of welding current is provided by means of a four point range selector switch with settings marked--"Min", "100" "175" and "Max"
A field rheostat controlled by a pointer, furnishes an infinite number of fine adjustments within each of the above ranges.
For any current value desired, the range selector switch or tap switch is set in its proper position in the range desired, and the rheostat pointer is used to obtain accurate current adjustment. The easy to read dial under the rheostat pointer is calibrated for actual welding with varying arc voltage from approximately 20 volts at the minimum end and 30 volts at the maximum end.
Two convenient outlets are provided which may be used for lamps or to operate power tools in an emergency. 110 volt lamps or 110 volt universal power tools nay be used when not welding.

SPECIFICATIONS

GENERATOR: 200 Ampere direct current type of special design, drooping voltage, self excited, two ball bearing construction.

ENGINE: Wisconsin VF-4, four cylinder air-cooled engine, bore 3¼", stroke 3¼".
Piston displacement- 107.7 cubic inches, 22 H.P. at 2150 RPM (normal operating speed).
Ignition- High tension magneto ignition with impulse coupling for easy hand cranking.
The oil capacity of the crank case is four quarts.
Engine has complete pressure lubrication for long life.
Gasoline tank capacity 5 gallons. Fuel rate 50% duty cycle approximately one gallon per hour.

WELDING RANGE: 25 to 250 amperes at 20 to 30 volts-50% duty cycle.

GOVERNOR: Constant speed flyball type.

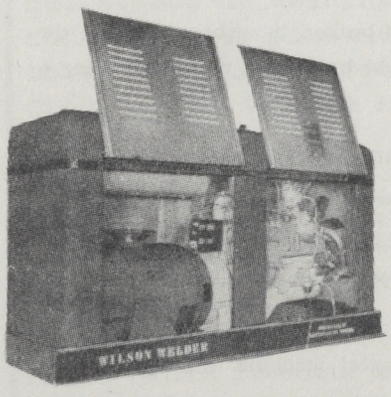
RUNNING GEAR: 2 wheel pneumatic tired spring type trailer. Tires 5.50" x 16", 4 ply, tread 62", length 76", drawbar 38" long with standing support and clevis hitch.

For further information on this fine "WILSON" machine, please write for a Manufacturer's catalogue.

WILSON YELLOW JACKET

ARC WELDER

Available in 200-300 and 400 ampere Machines



DESCRIPTION

The Wilson "YELLOW JACKET" was originally developed especially for the severe service encountered in oil field and pipe line welding.

DISTINCTIVE FEATURES

The latest designed Model BA6 Generator is used on the "YELLOW JACKET". It is a D.C. Generator, 40 Volt NEMA rating. The current range wide and is divided into a "high" and "low" range by means of a selector switch. This makes the machine adaptable to all types of welding, from light sheets to the heaviest castings.
High open circuit voltage at all settings facilitates starting and maintaining a steady arc. Current adjustments are made by a sturdy handwheel which raises and lowers an iron core in the upper or "control pole". Accurate adjustments---easily and quickly made---are assured by the single pole control. No external resistances or brush shifting devices are used---current output remains constant even after the machine becomes warm.
Single row ball bearing with grease retainer.
A new improved idling device, which permits the engine to slow down when no welding is being done, is incorporated. The engine will be accelerated to full speed instantly when the operator strikes an arc. This device needs no oiling or other attention.
A cut-out relay is provided to prevent over-charging the battery.

PRICES ON APPLICATION

THE HORNET "CX" ARC WELDER

New Improved Design

CANADIAN MADE

CONTROLLED REACTANCE
for
MAXIMUM ARC STABILITY



Not since the introduction of the original Wilson "Hornet" in 1939 has a welding machine been produced in which so many outstanding features are incorporated as are to be found in the Wilson "HORNET CX". The unit represents the latest developments in welding generator design and combines exceptional welding characteristics with smart appearance, light weight and the simplest possible controls. The controls are the acme of simplicity; a two-range switch is placed in the "low" position for light welding, in the "high" position for medium and heavy welding and then the exact welding current required is obtained by setting an easy-to-read scale on the hand-wheel at the desired current. A single turn of the hand-wheel covers the complete welding range while the polarity of the welding current is positively controlled by a small toggle switch, plainly marked "reverse" and "straight" polarity. Accidental reversal of the welding current, a frequent source of annoyance and trouble in large shops is impossible with the "HORNET CX" A new type start-stop switch enables the unit to be started or stopped without any searching for the correct button. The basic design is that of the original Hornet. The symbol "CX" stands for "controlled reactance"; X being the electrical symbol for " reactance". Reactance is necessary in a welding generator to provide a stable arc, but only the "HORNET CX" has "controlled reactance", which is automatically changed with each change in current setting,

PRICE $621.00
ACCESSORIES $58.00
F.O.B. WINNIPEG

DISTINCTIVE FEATURES

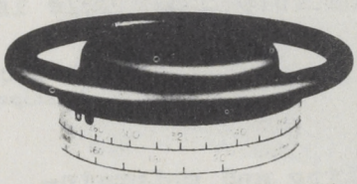
GENERAL ASSEMBLY

The rotor and armature are mounted on a single alloy steel shaft, supported by two oversize bearings with the rotating parts statically and dynamically balanced to operate with a minimum of noise and vibration. A suitable fan provides adequate ventilation, drawing air into both the generator and motor housings and expelling it through the ends of the top housing. This heavy duty type of arc welder is rated in accordance with N.E.M.A. and C.S.A. standards on a 60% duty cycle at rated load of 300 amperes. Current range is less than the minimum 20% of rating required by N.E.M.A. standards, while maximum output is considerably in excess of the required 125% of rating. The "HORNET CX" is versatile; combined in one unit is the minimum output of the conventional 200 ampere welding generator and the maximum output of ordinary 300 ampere units.

MOTOR

Induction type with rugged squirrel cage rotor available for 220-440/3/60 and 550/3/60 power supply.

CONTROLS



A hand-wheel conveniently located on top of the unit with an easy-to-read scale and a high-low switch are the only controls required. A small polarity switch, plainly marked "Reverse" and "Straight" provides simple positive control of the polarity. Accidental polarity reversal is impossible with the "HORNET CX". The polarity cannot be changed except by operating the polarity switch. The controls are so simple and plainly marked that no previous experience or training of the operator is required.

GENERATOR

The single control pole design, with fixed pilot pole excitation, which has proved so successful on the Hornet during the past ten years is retained on the "HORNET CX" with improvements and refinements. This design provides reactance which varies directly with the load and makes field rheostats unnecessary as well as eliminating external reactance coils and tap changing switches with their attendant high losses and maintenance costs. Interpoles and the carefully designed commutator with brushes of ample cross section insures sparkless commutation with resultant long brush and commutator life. The electrical circuit consists of two main poles, one with a shunt winding and the other separately excited from a small rectifier. A series control pole and two interpoles complete the field windings. All coils are wound with fibre glass insulation having extremely high heat resistance. The simplicity of the electrical and magnetic circuits are in accordance with excellent design and the best modern engineering practice. The control coil is completely surrounded by an iron frame with a movable core; the air gap in this high reactance circuit is adjusted by a hand-wheel, one turn covering the complete welding range. This controls the output and adjusts the reactance in accordance with the welding current, giving exceptional arc stability.

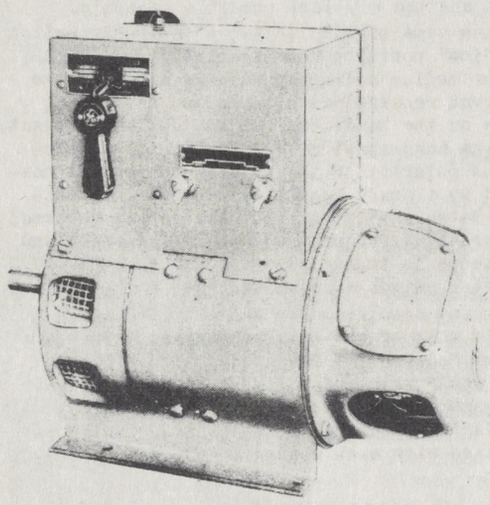
STARTER

Push button operated magnetic starter with thermal overload relays, and under-voltage protection. Especially designed for welding service with all wearing parts low in price and readily replaceable. Suitable terminals are provided for the power supply lines and for reconnection of the dual voltage 220-440/3/6- stator windings.

RUNNING GEAR

The Wilson "HORNET CX" can be supplied for stationary mounting or equipped with either steel, solid rubber or pneumatic tired wheels. The compact design makes the unit exceptionally easy to move around the shop.

WILSON-WASP Arc Welding Generator
150-200-300 AMPERE — BELT DRIVEN 3600 R.P.M.



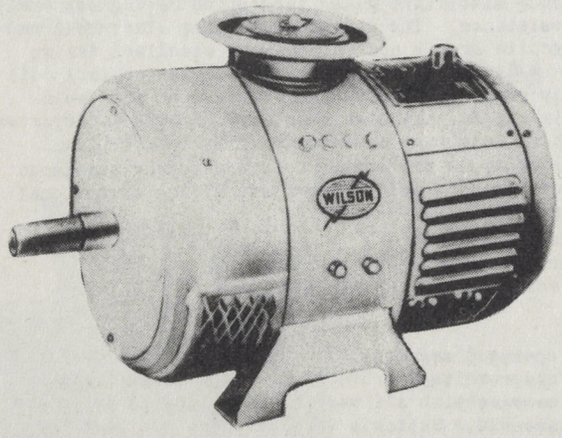
Price 150 Amp. $306.00
200 Amp. 358.00
F.O.B. Winnipeg

Wilson arc welding generators are of two bearing construction using the finest type of ball bearing for smooth operation and long life. The belt drive principle is an improvement over the older type direct coupled as it absorbs the shock of the arc striking, reducing engine bearing wear to a minimum. The controls are mounted on top of a drip-proof sheet metal hood which can be opened without disturbing the wiring. In the control cabinet are mounted the series field switch, field rheostat and reactor. Due to the improved design weight and size have been reduced but efficiency has been increased. The generator is a drooping, self excited and direct current type, and will perform equally well on thin sheets and on heavy plates and castings.

The current control is a range selector type switch with individual settings marked so that they are easily read by the operator. There is a field rheostat which furnishes an infinite number of fine adjustments. For any current value desired the tap switch is set in its proper position for the job and the rheostat pointer is used to obtain an accurate adjustment.

The welding range of the 150 ampere welder is from 20 to 200 amperes at 25 volts on a 60% duty cycle. The 200 ampere welder has a range of 25 to 250 amperes at 20 to 30 volts on a 60% duty cycle.

WILSON MODEL "BA 3" GENERATOR



200 and 300 AMPERE — DIRECT CURRENT

The Model BA3 Generator is an 1800 R.P.M. for direct coupled drive. Due to the low speed it is of heavier and larger construction than the Wilson Wasp Generator, however, it can also be used as a belt driven unit.

The Model BA3 is a four pole generator with four interpoles. The adjustable upper pole is a patented feature.

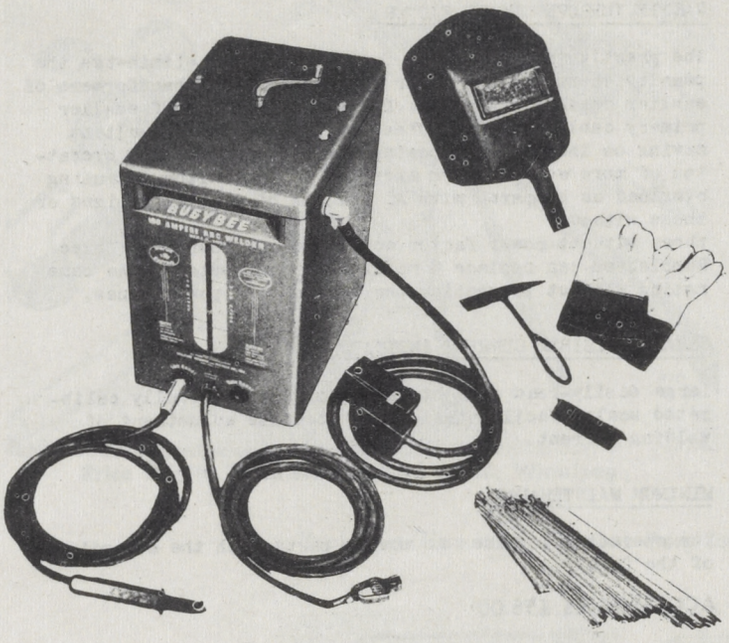
Price $445.00
F.O.B. Winnipeg

High open current voltage at all settings facilitates starting and maintaining a steady arc. The movable core in the upper pole provides an excellent reactance. Accurate adjustments are quickly and easily made due to the single pole control and the current output remains constant even after the machine becomes warm.

A. C. TRANSFORMER ARC WELDER

WILSON "BUSYBEE" ARC WELDER

COMPLETE WITH ACCESSORIES



PRICE $311.00 ACCESSORIES INCLUDED
F.O.B. WINNIPEG

DESCRIPTION

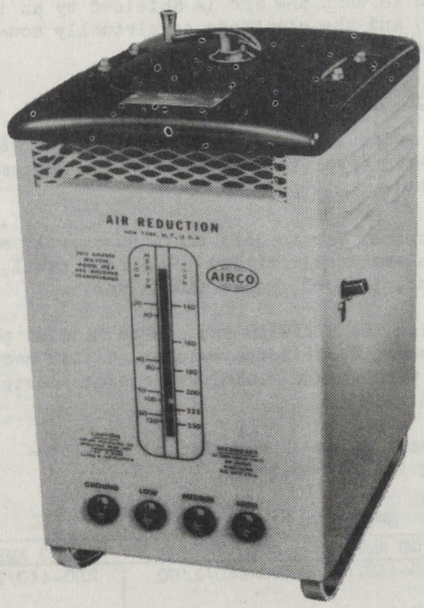
The "Busybee" has been developed to fill the need for a "Tool" to repair all kinds of farm machinery. It is the answer to requests from rural garages and repair shops for a high quality, light capacity welder for intermittent operation on rural power supply lines. Its light weight and small size also makes it ideal for home workshops or jobs requiring a portable welder, where proper power facilities are available.

DISTINCTIVE FEATURES

The Busybee" is available in 180 ampere size for operation on 230 volt, 60 cycle, single phase current, and is designed to handle electrodes as large as 5/32" in diameter.
Easy to strike the arc, because of it's unique design, the "BUSYBEE" produces the maximum allowable current at the instant the arc is started--without the use of contactors. relays or special equipment.
The machine is so designed that it is possible to operate satisfactorily at a lower open circuit voltage than conventional machines.
Current adjustment is obtained by easy-to-operate handle on top of welder. Full-view, direct reading indicator on front panel, is graduated in electrode sizes and indicates correct current setting for each diameter of electrodes.
A novel feature of the "Busybee" is the built-in electrode gauge at the bottom of the front panel. Consisting of slots clearly marked for each electrode diameter, it provides an easy and positive method of checking the size of electrodes.
Internal equipment is enclosed in an electrically grounded all-metal cabinet--finished in durable blue enamel.
Maximum protection against burnouts is assured by the use of heat and moisture resistant spun-glass insulation on all windings.
Protection against overloads is provided by a circuit breaker built into a heavy-duty "ON and "OFF" switch.
The new design of the "Busybee" results in low input KVA and high power factor far above the average without the use of Capacitors. The machine has been arranged for use with capacitors where necessary. In most cases they are not required.
The "Busybee" is furnished complete---ready to operate, with a full set of accessories.

NEW WILSON "MCX"

TRANSFORMER WELDER



PRICE $327.45
ACCESSORIES $45.00
F.O.B. WINNIPEG

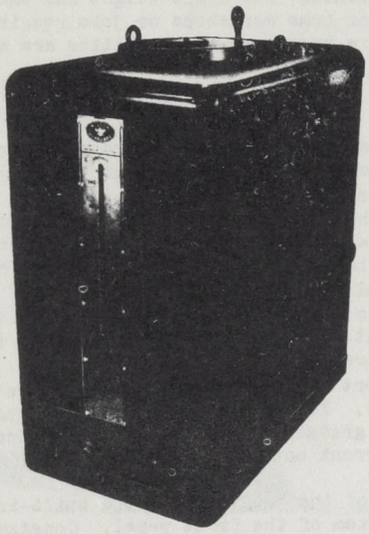
This new machine incorporates all of the latest design and construction features of modern transformers and the use of high temperature water repellent silicone insulation which makes it possible to compress a full-rated 200 ampere machine. The model MCX also features an AUTOMATIC hot start control using an hermetically sealed gas-filled, time-delay relay magnetic switch with no open contact. Current adjustment is accomplished by means of a hand crank conveniently located on top of the machine by which the operator can achieve an infinite number of current settings. The MCX draws 7.5 kilowatts at rated load of 200 amperes, which is well below the 8.5 figure established by some Power Companies for 220 volt lines

The welder has two current ranges. The low range is from 30 to 110 amperes, the high range from 90 to 275 amperes.
All windings are covered with the latest spun-glass fibre, heat resistant Class B non-inflammable insulation. Dual voltage connections are provided for quick change from 220 to 440 volts or vice versa and from 440 to 550 volts.

NEMA Rating:	200 amperes	Open Circuit Voltage:	58
Rated Volts	30	Electrode Capacity:	1/16" to 3/16"
Duty Cycle:	50%	Weight:	154 lbs.
Current Range:	30 - 250 amperes	Dimensions:	12" x 17" x 23"

This machine is being supplied for 60 cycle service only in either 220, 440 or 550 primary voltage.
Full view scale makes correct settings easy to read at all times. Since the indicator is inside the case, it is not easily damaged and will remain accurate indefinitely.

300-400-500 Ampere – Wilson "Bumblebee"



"Bumblebee" offers other desirable qualities important to efficient economical welding performance as follows.

WIDE CURRENT RANGE

The advanced "Bumblebee" design affords a wide current range of 60 to 375 amperes for the 300 ampere machine, 80 to 500 amperes for the 400 ampere model and 100 to 625 amperes for the 500 ampere type.

Price—300 Amp. $538.00
400 Amp. 691.00
500 Amp. 825.00

F.O.B. WINNIPEG

IMPROVED ELECTRICAL EFFICIENCY

Improved electrical efficiency at rated load of 81%, 85% and 83% is provided respectively for the 300, 400 and 500 ampere sizes.

LOW OPEN CIRCUIT VOLTAGE

Open circuit voltage (75 volts) works to greater advantage on new AC electrodes and gives perfect ease of welding.

VASTLY IMPROVED POWER FACTOR

The greatly improved power factor virtually eliminates the penalty charge of low power factor at which transformers of earlier designs operated. It permits the use of smaller primary cable, line switches and fuses with a resultant saving on installation costs. It also permits the operation of more welders from existing feeders without causing overload as compared with AC welders of earlier designs or those withour
those without power factor correction. Generally, three Bumblebees can replace 2 motor generator sets of the same rating without increasing the load of the power lines.

CLEARLY VISIBLE CURRENT INDICATOR

Large easily-read current indicator with carefully calibrated scale, facilitates quick, accurate adjustment of welding current.

MINIMUM MAINTENANCE

Its operation involves no moving parts with the exception of the fan.

ACCESSORIES $58.00

200-400-800 Ampere–Wilson "Heliweld Bumblebee"



This Bumblebee was specifically designed for use with AIRCO'S gas shielded arc welding process---HELIWELDING. It differs from metallic welding in that the arc is shielded by an inert gas (Helium or Argon) and the electrode is virtually non-consuming (usually tungsten)

THE ADVANTAGES OF HELIWELDING ARE:

1. Gas shielding of welding are prevents oxidation of weld metal and electrode--the formation of slag and the necessity for flux are eliminated.

2. HELIWELDING is an easy way to join the hard-to-weld metals---aluminum, stainless steel, killed low carbon steel, brass, copper, everdur, inconel, monel and silver.

3. The ease with which the HELIWEID arc can be handled permits high welding speeds, facilitates welding of thin sections without burning through and minimizes carbide precipitation and distortion.

4. HELIWELDING produces welds of exceptional quality--little or no finish grinding required.

SPECIFICATIONS

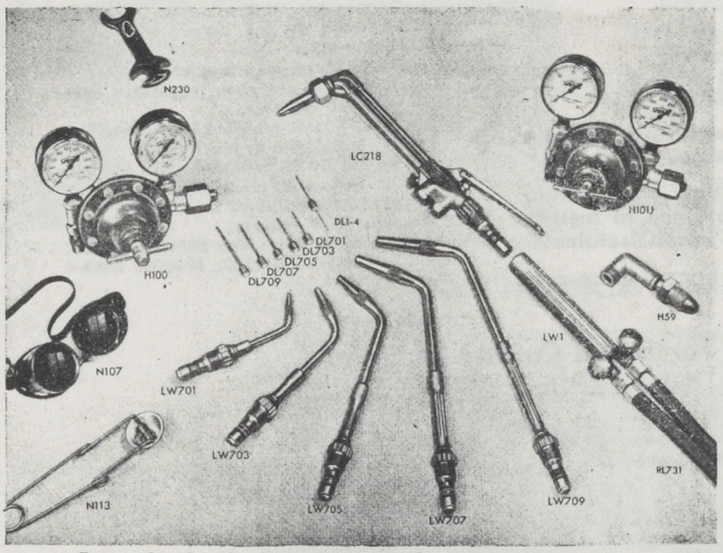
RATING	200 AMP.	400 AMP.	800 AMP
Primary Circuit	220-440/60	220-440/1/60	220-440/1/60
Current range			
100 Volts D.C.	40-200 Amp.	90-400 Amp.	175-800 Amp.
150 Volts D.C.	30-120 Amp.	60-250 Amp.	125-500 Amp.
Duty Cycle	60%	60%	Continuous
Primary Input (at rated load)	14.1 K.V.A.	28.16 K.V.A.	54.0 K.V.A.

PRICES ON APPLICATION

SMITH'S
No. LS 318

Welding and Cutting Outfit Complete

(with Type BB regulators)



Price Outfit Complete $178.35 F.O.B. Winnipeg

Featuring Smith's *LIFELONG GUARANTEE* Welding Torch Body and Cutting Assembly

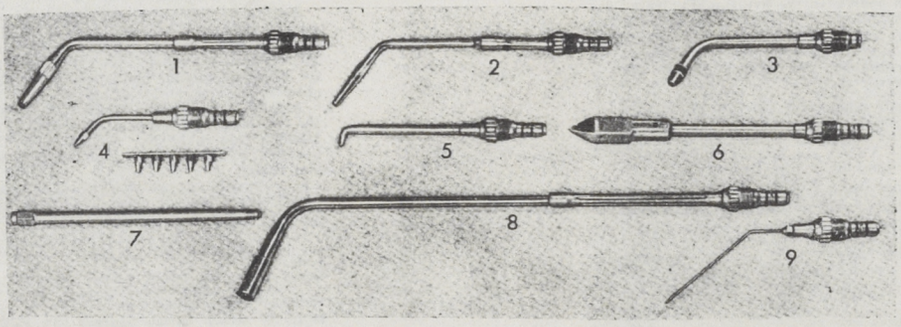
Welding range with 5 tips included — 1/16" to 1".

Cutting range with tip included — up to ¾" steel.

THIS OUTFIT CONTAINS

- 1 — LW1 Lifelong welding torch body
- 1 — ea. Welding tips Nos. LW701, LW703, LW705, LW707, LW709
- 1 — LW12 Canvas carrying case
- 1 — LC218 Lifelong cutting assembly (80° head) with tip No. LC2-4 and N230 wrench
- 1 — H100 BB oxygen regulator
- 1 — H101J BB acetylene regulator with H59 adaptor
- 1 — RL731 25 ft. length ¼" 2-in-1 hose with connections
- 1 — N113 torch lighter
- 1 — Pair N107 goggles
- 1 — ea. Tip cleaners Nos. DL701, DL703, DL705, DL707, DL709, DL1-4

Welding Tips and Special Purpose Tips for LIFELONG Torch Body



(1) Long flame welding tips (see chart below) made in 13 sizes from LW700 to LW712, inclusive. Tip end section is made of hard-drawn copper bent to a 67½° angle. Individual mixing sections are at rear end of tip, away from reflected heat. Tips vary in weight and length according to the work for which they are designed. Individual copper sections or mixing sections may be ordered by specifying tip number and section desired.

Tips LW700 to LW709 $6.40 Tips LW710 to LW712 7.25

(2) Special production tips for hard facing, pipe welding, oil field bit welding and similar types of work where shorter tip length and lighter weight are essential. Tips produce long, soft flames for better and faster work. Made in sizes LW205 to LW211, inclusive. If individual copper bent sections or mixing sections are desired, specify tip size and which piece you want. Priced at one-half the complete tip price.

Tips LW205 to LW209 6.40 Tips LW210 to LW211 7.25

(3) Soldering tips are made in 5 sizes, Nos. LT201, LT202, LT203, LT204, LT205 and burn acetylene only. The larger sizes especially, are ideal for body leading and other types of soldering, light brazing and heating. All sizes produce clean, hot flames so essential to good work. Average weight, 6 oz.

Tips LT 201 to LT 204 4.65 Tips LT 205 5.15

(4) Smith's Lead Burning Assembly is suitable for battery work, lead welding, and various types of soldering, light brazing and even some welding on very light metal. It comes with 6 interchangeable tip ends, Nos. LT101, LT102, LT103, LT104, LT105, LT106, and a convenient tip end holder. Weight, 8 oz.

LT100 Lead burning assembly with 6 tip ends and holder, S 6.41

(5) Cylinder welding tips have a short bend at the tip end and are used for welding cracks in cylinder walls or in other confined places where the opening is 1½ ins. or larger in diameter. Available in sizes LW404, LW405, LW406, LW407 and LW408. Average weight, 9 oz. 7.25

(6) Smith's Soldering Assembly is a handy tool for soldering tanks, radiator surfaces, wiring connections and similar work where only a soldering copper can be used. Operates on oxygen and acetylene gases—maintains a steady heat.

LT300 Soldering assembly with 1 lb. bit 8.50
LT302 1 lb. bit 4.25
LT303 2 lb. bit 4.85
LT301 Soldering assembly, less bit 4.25

(7) Tip extension fits between the copper bent section and mixing section of welding tips Nos. LW705 and larger. Nine ins. long and is used to extend welding tip length for extra hot jobs.

LW50 Tip extension 4.25

(8) Smith's Heating Tips Made in two sizes. Consume oxygen and acetylene gases to provide a large volume of fast, concentrated heat. Petroleum fuel gases may also be used but volume of heat is lower because of lower flame temperature. Weight—LT505, 22 oz.; LT503, 18 oz.

LT505 Large size, complete 15.75
Copper bent section 12.10
Mixing section 3.65
LT503 Small size, complete 13.30
Copper bent section 10.10
Mixing section 3.20

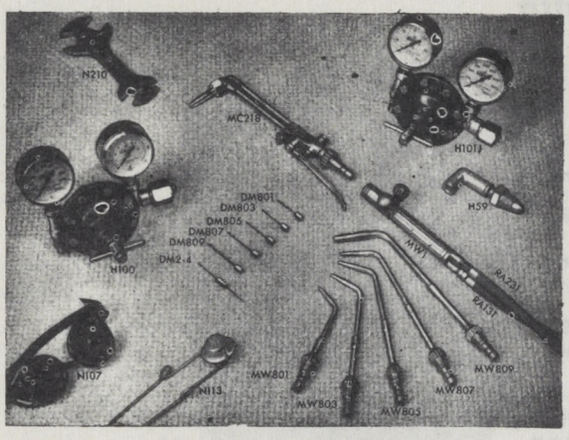
(9) Radiator Tip made especially for radiator work or for reaching other hard-to-get-at places. Has a 6-in. flexible tube and is made to operate with oxygen and acetylene gases.

LT400 Radiator tip complete 4.25
LT401 Replacement flexible tube 1.05
LT402 Replacement mixing section 3.25

SPECIFICATIONS ON WELDING TIPS LW700 to LW712 INCLUSIVE

TIP SIZE	LW700	LW701	LW702	LW703	LW704	LW705	LW706	LW707	LW708	LW709	LW710	LW711	LW712
LENGTH—Inches	6 5/16	6 5/16	7 5/16	8 1/2	9 1/2	10 11/16	11 11/16	12 11/16	13 3/4	14 5/16	15 11/16	16 11/16	17 11/16
WEIGHT—Ounces	6 1/2	6 1/2	7	8 1/2	9	11	12	12 1/2	13 1/2	14 1/2	14 3/4	15 1/2	16 1/2
DRILL SIZE	71	63	58	54	52	48	44	40	36	32	28	26	25
CLEANER NO.	DL700	DL701	DL702	DL703	DL704	DL705	DL706	DL707	DL708	DL709	DL710	DL711	DL712
CONSUMPTION Each Gas, Cu. Ft.	3 1/2	5	6	9	12	21	23	36	50	58	100	106	108
RANGE—Inches	1/32	1/16	1/16-1/8	1/8-3/16	3/16-1/4	1/4-3/8	3/8-1/2	1/2-3/4	3/4-1	1 & Over	Heavy Castings, Etc.		

SMITH'S
No. MS 318



MIDLINE Welding and Cutting Outfit Complete

Welding range with 5 tips included — 1/32" to 3/8".

Cutting range with tip included — up to 3/4" steel.

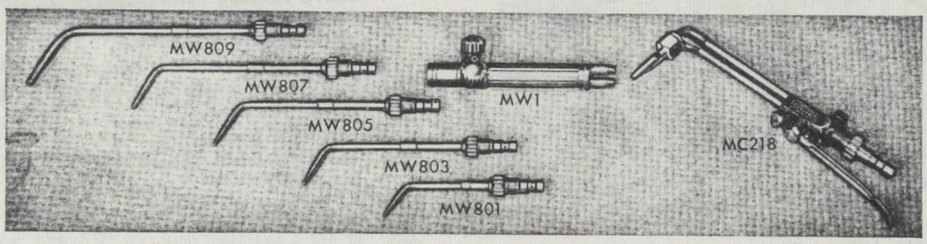
Additional welding and cutting tips may be obtained to further increase the all-'round usefulness.

OUTFIT COMPLETE $159.60

THIS OUTFIT CONTAINS:

- **1 — MW1 Midline welding torch body**
- **1 — ea. welding tips Nos. MW801, MW803, MW805, MW807, MW809**
- **1 — MW12 canvas carrying case**
- **1 — MC218 80° Midline cutting assembly with tip No. MC2-4 and N210 wrench**
- **1 — H100 BB oxygen regulator**
- **1 — H101J BB acetylene regulator with H59 adaptor**
- **1 — RA131 25 ft. length 3/16" acetylene hose with connections**
- **1 — RA231 25 ft. length 3/16" oxygen hose with connections**
- **1 — N113 torch lighter**
- **1 — Pair N107 goggles**
- **1 — ea. tip cleaners Nos. DM801, DM803, DM805, DM807, DM809, DM2-4**

Smith's *New* *MIDLINE* Welding Torch and Cutting Assembly



Midline Welding Torch

This welding torch body with the five tips illustrated is included in all outfits 13 welding tips are available for use in the MIDLINE torch body giving it a welding range from 1/32" to 5/8". Special purpose tips also available. An ideal torch for the average garage or repair shop.

All tips and the cutting assembly slip into torch body head and may be swivelled to any desired position even with flames lighted. Torch body is 7 inches long and weighs only 11¾ oz. Valves are located at front end of body for easy one hand flame adjustment.

Exclusive FLO-TROL feature prevents pre-mixing of gases, popping and back-firing and assures longer life.

The torch illustrated has five tips, one each Nos. MW801, MW803, MW805, MW807 and MW809, but may be ordered with any assortment of tips desired. See complete tip listing below. $49.60

MS120 Midline Welding Torch with 5 tips, case and cleaners
MS308 & MS309 Midline Welding and Cutting set. Consists of MS120 welding torch set and Midline Cutting Assembly MC218 or MC219, 79.85
MW1 Midline Welding Torch Body only 18.76
MW11 Replacement needle valve stem 1.21
MW12 Torch bag 1.21
F250-4 Seal rings, .06

Midline Cutting Assembly

Back end slips into the MIDLINE torch body and forms a light, well balanced cutting torch with a cutting range from 1/8" to 1½". Five sizes of cutting tips, Nos. MC1-4, MC2-4, MC3-4, MC4-4 and MC5-4, are available for ordinary cutting plus special tips for cutting thin sheet metal and rivet cutting.

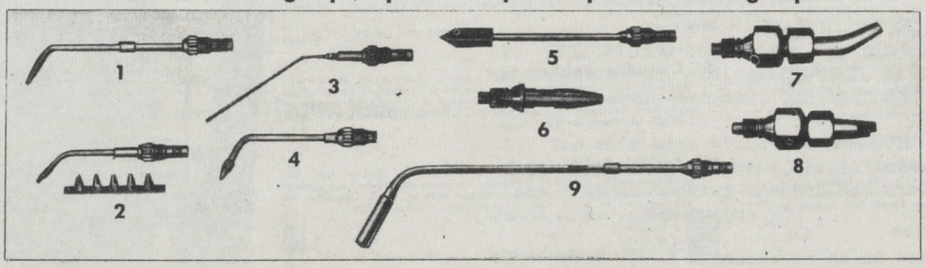
Assembly No. MC218 which has 80° angle head and tip No. MC2-4 is supplied in Outfit Nos. MS318 and MS338. Assembly No. MC219 which has 90° angle head and tip No. MC2-4 is supplied in Outfit Nos. MS319 and MS339.

In this cutting assembly, FLO-TROL offers maximum protection against damage caused by pre-ignition of gases and back-fire. Each gas is separated and directed through its proper channel so that the conditions leading to back-fire are eliminated.

The MIDLINE Cutting Assembly has sufficient capacity to handle any light and medium cutting that the average garage is called upon to do.

MC218 80° Midline Cutting Assembly with MC2-4 tip, N210 wrench, and cleaner DM2-4, 30.25
MC208 80° Midline Cutting Assembly 23.45
MC219 90° Midline Cutting Assembly with MC2-4 tip, N210 wrench, and cleaner DM2-4, 30.25
MC209 90° Midline Cutting Assembly 23.45
N210 Wrench, 1.50

Midline Welding Tips, Special Purpose Tips and Cutting Tips



(1) Standard Welding Tips made in 13 sizes. Each tip has individual mixing section and hard drawn copper bent section. See chart on page 36.
MW800, MW801, MW802, MW803, MW804, MW805, MW806, MW807, MW808, MW809 complete tips, 5.55
MW810, MW811, MW812 complete tips, 6.30

(2) MT100 Lead Burning Assembly with 6 tip ends and holder. Uses same tip ends as LT100 6.41
MT107 Mixing section for MT100 2.80
MT108 Bent section for MT100, 1.10

(3) MT400 Radiator Tip, 3.80
MT401 Tip end for MT400, 1.05
MT402 Mixing section for MT400, 2.80

(4) MT204 Soldering Tip. Burns acetylene, $ 4.25

(5) MT300 Soldering Assembly with bit, 2.25

(6) Standard Cutting Tips made of hard drawn copper by special swaging process. Have four pre-heat holes and are 2¾" in length. Each tip has one fixed and one moveable seat.
MC1-4, MC2-4, MC3-4, MC4-4, MC5-4, (specify size) 4.55

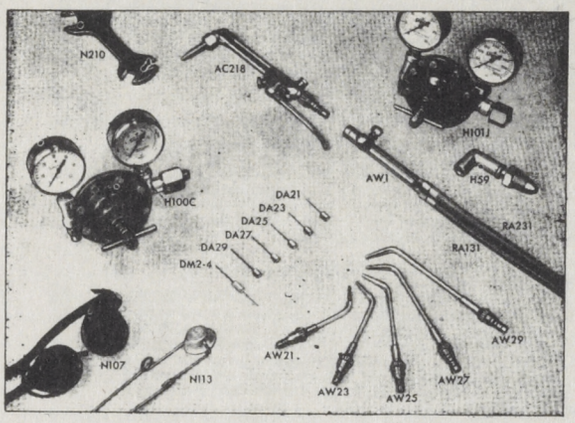
(7) MC51-0 and MC52-0 Rivet Cutting Tips, 5.75
MC51-2 Replacement mixing section with head nut for MC51-0, MC52-0, MC61-0 and MC62-0, 2.75
LC51-1 Replacement tip end and nut for MC51-0, 3.05
LC52-1 Replacement tip end and nut for MC52-0, 3.05

(8) Step Type Cutting Tip for light metal. Made in two sizes.
MC61-0 for 24 gauge to 14 gauge
MC62-0 for 18 gauge to 1/8" 5.75
LC61-1 Replacement tip end and nut for MC61-0, 5.75
LC62-1 Replacement tip end and nut for MC62-0, 3.05 3.05

All of the cutting tips on this page except MC4-4 and MC5-4 can be used in the Airline Cutting Assembly listed on Page 10.

(9) Heating Tips provide concentrated heat. Consume oxygen and acetylene gases. Two sizes.
MT505 Large size, 13.30
MT503 Small size, 10.90

SMITH'S
No. AS318



AIRLINE Welding and Cutting Outfit Complete

$149.50 F.O.B. WINNIPEG

Welding range with 5 tips included — 1/32" to ¼".

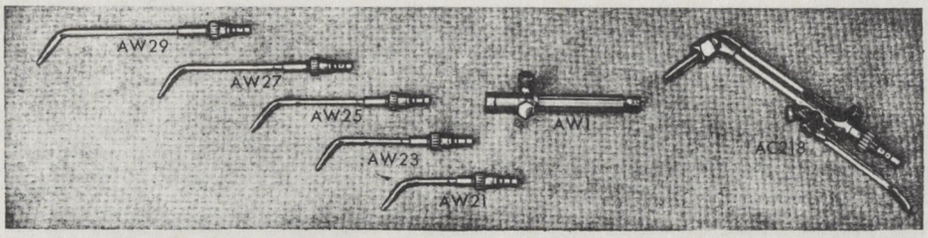
Cutting range with tip included — up to ¾" steel.

Additional sizes of welding and cutting tips plus those for special work are obtainable for use in this outfit. See catalog page enclosed in outfit.

THIS OUTFIT CONTAINS:

- **1 — AW1 Airline welding torch body**
- **1 — ea. welding tips Nos. AW21, AW23, AW25, AW27, AW29**
- **1 — AW12 Canvas carrying case**
- **1 — AC218 80° Airline cutting assembly with No. MC2-4 tip and N210 wrench**
- **1 — H100C BB oxygen regulator**
- **1 — H101J BB acetylene regulator with H59 adaptor**
- **1 — RA131 25 ft. length 3/16" acetylene hose with connections**
- **1 — RA231 25 ft. length 3/16" oxygen hose with connections**
- **1 — N113 torch lighter**
- **1 — Pair N107 goggles**
- **1 — ea. tip cleaners Nos. DA21, DA23, DA25, DA27, DA29, DM2-4**

Smith's *New* *AIRLINE* Welding Torch and Cutting Assembly



Airline Welding Torch

The AIRLINE Welding Torch is the featherweight in Smith's line of fine torches. It is smaller and lighter than either the Lifelong or Midline. With the largest size of welding tip (No. AW30) it weighs only 9½ ounces and is 12¾ inches long. Torch body alone is 5¾ inches long and weighs 6 ounces.

The needle valves are located at the front end of the torch body and placed at a 60° angle for easy finger tip control of flame adjustment. Welding tips and cutting assembly are designed with Smith's new slip in feature which permits them to be swivelled to any desired position even with the flames lighted. Finger tip pressure on tip nut or back end nut makes a gas tight seal and **no wrench is necessary** for this purpose.

New needle valve design and improved packing eliminate leakage and accidental change in flame adjustment.

Torch No. AS120 has five tips (one each Nos. AW21, AW23, AW25, AW27, AW29) and is supplied in all standard outfits listed on Page 9.

AS120 Airline Welding Torch with 5 tips, case and cleaners,	$37.50
AS308 & AS309 Airline Welding and Cutting set. Consists of AS120 welding torch set and Airline Cutting Assembly AC218 or AC219,	67.75
AW1 Airline torch body only,	
AW11 Replacement needle valve stem, price	16.15
AW12 Canvas carrying case,	1.20
F640-4 Seal rings,	1.20
	.06

Airline Cutting Assembly

The AIRLINE Cutting Assembly fits the Airline torch body and converts the equipment, in a matter of seconds, into a convenient cutting torch with a capacity up to 1½" steel. Tip No. MC2-4 supplied in the AIRLINE Cutting Assembly included in the outfits listed on Page 9 cuts steel up to ⅝" thick. Two other sizes of tips, Nos. MC1-4 and MC3-4 plus special tips for rivet cutting and light metal cutting may also be ordered to further add to the range and usefulness.

Cutting Assembly No. AC218 has 80° angle head and is supplied in outfits AS318,and AS338. No. AC219 has 90° angle head and is supplied in outfits AS319 and AS339.

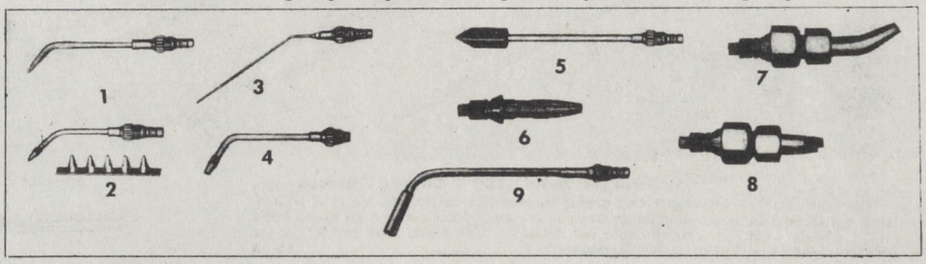
Tips No. MC4-4 and MC5-4 not recommended for use in Airline Cutting Assembly.

Exclusive FLO-TROL design guards against damage caused by back-fire and reverse flow of gases, by properly directing each gas into its proper channel. This eliminates conditions leading to the usual troubles found in equipment which does not incorporate Smith's unique FLO-TROL feature.

AC218 80° Airline cutting assembly with tip No. MC2-4, wrench No. N210 and tip cleaner,	30.25
AC208 80° Airline cutting assembly	23.45
AC219 90° Airline cutting assembly with tip No. MC2-4, N210 wrench and tip cleaner.	30.25
AC209 90° Airline cutting assembly only,	23.40

Shipping weight—assembly with tip and wrench, 2 lbs.

Airline Welding Tips, Special Purpose Tips and Cutting Tips



(1) Standard Welding Tips made in sizes **AW18, AW19, AW20, AW21, AW22, AW23, AW24, AW25, AW26, AW27, AW28, AW29, AW30.** Each tip has bent section made of hard drawn copper and individual mixing section. (specify size) Each 3.90

Replacement copper sections and mixing sections are priced at one-half the price of the complete tip. Order by tip number.

(2) AT100 Lead Burning Assembly with 6 tip ends and holder, 5.70

AT107 Replacement mixing section,	1.95
AT108 Replacement bent section,	1.10
LT101, LT102, LT103, LT104, LT105, LT106 tip ends,	.35

(3) AT400 Radiator Tip, $ 2.95

AT401 Replacement tip end,	1.05
AT402 Replacement mixing section	1.95

(4) AT204 Soldering Tip, burns acetylene 3.40

(5) AT300 Soldering Assembly with bit, 7.25

(6) Standard Cutting Tips made of hard drawn copper by a special swaging process. Have four preheat holes and are 2¾" long. Each tip has one fixed and one moveable seat.

MC1-4, MC2-4, MC3-4 cutting tips, (specify size) Each 4.55

(7) MC51-0 and MC52-0 Rivet Cutting Tips, 5.75

MC51-2 Replacement mixing section with head nut for MC51-0, MC52-0, MC61-0 and MC62-0,	2.70
LC51-1 Replacement tip end and nut for MC51-0,	3.05
LC52-1 Replacement tip end and nut for MC52-0,	3.05

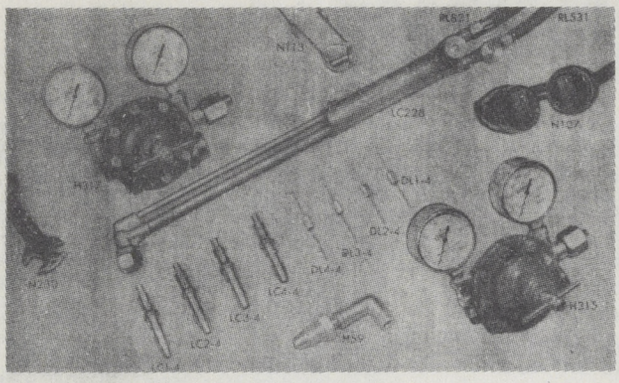
(8) Step Type Cutting Tip for light metal. Two sizes

MC61-0 For 24 gauge to 18 gauge	5.75
MC62-0 for 26 gauge to 1/8",	5.75
LC61-1 Replacement tip end and nut for MC61-0,	3.05
LC62-1 Replacement tip end and nut for MC62-0,	3.05

(9) AT505 Heating Tip provides concentrated heat. Consumes oxygen and acetylene gases. 10.00

Copper bent section,	7.75
Mixing section,	3.15

SMITH LIFETIME CUTTING EQUIPMENT



OUTFIT No. IS368 Includes the following:

1 LC238 Lifetime Button Type cutting torch with 4 tips, wrench, case and cleaners.
1 H317--Type BB-2 Oxygen cutting regulator with gauges.
1 H315--Type BB-2 Acetylene regulator with gauges and H59 adapter.
1 Pair N107 goggles.
1 N113 torch lighter.
1 RL531--25 ft. length 1/4" 2 braid acetylene hose.
1 RL831--25 ft. length 1/4" 3 braid oxygen hose.

Priced At $177.15 F.O.B. Winnipeg

For Heavy, Prolonged Cutting Jobs

This outfit shows up to best advantage on tough cutting jobs. It is used for all types of manual cutting operations in steel mills, shipyards, foundries, scrap iron yards — any place where a torch must give top performance under difficult conditions. The equipment is especially designed to pass oxygen at high pressures and in ample volume required for heavy and continuous cutting. The torch itself is ruggedly constructed to provide maximum trouble-free service.

Many Different Uses

The standard outfit has four cutting tips Nos. LC1-4, LC2-4, LC3-4 and LC4-4 with a range from ⅛" to 4" steel. Patented construction features assure fast, economical cuts. Additional tip sizes for heavier cutting are available plus special types for gouging, rivet cutting, scarfing and light metal cutting. This is truly an outfit for any kind of cutting.

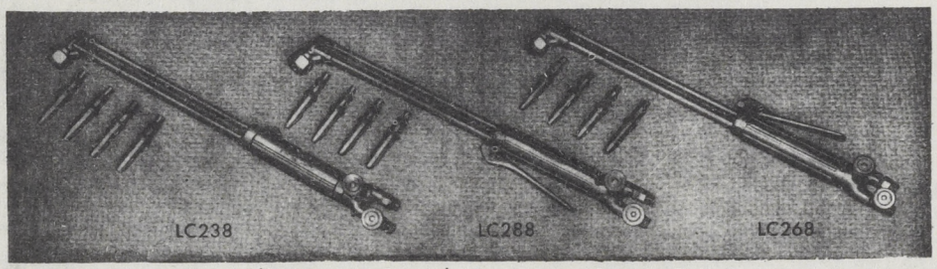
80° or 90° Angle Heads

Smith's Lifetime cutting torch, included with the outfit illustrated, has 80° angle head and latched button for control of the oxygen cutting jet. Torches with 90° angle head and over lever or under lever cutting jet control are also available. The under lever control is often-times preferred for long cuts because the weight of the torch is sufficient to hold the lever in the open jet position.

BB-2 Regulators Included

Type BB-2 (two-stage) regulators are furnished with the outfit illustrated above because of their ability to accurately maintain the required outlet pressure until the cylinders are nearly empty. For lighter cutting and intermediate jobs, the single stage Type BB regulators do an excellent job.

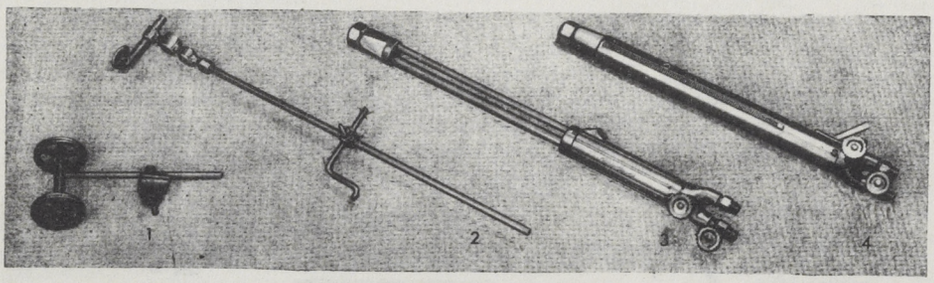
Smith's *Lifetime Guarantee* Cutting Torches



Smith's cutting torches come in two types (button or lever) which are identical except for the means of controlling the oxygen cutting jet. The button on Torch No. LC238 may be latches in the open position for continuous cuts. Torch No. LC288 has under lever cutting jet control. Torch No. LC268 has lever on top of handle. These torches are designed for heavy cutting up to 12" or more in thickness but the four tips regularly supplied have a range from 1/8" to 4" steel. A wide variety of tips including those for rivet burning, gouging, scarfing and light metal cutting are also available. The particular ability of these torches to withstand intense, reflected heat makes them especially favored for work in confined places. 80 degree angle head torches are illustrated above, but they come with 90 degree angle heads too. Unless otherwise specified, the 80 degree head button type is supplied as standard. Both types are fully protected by Smith's Lifetime Guarantee.

These outfits are furnished with, four cutting tips, Nos. LC1-4, LC2-4, LC3-4, LC4-4, Universal Wrench, dual tip cleaners and tip case. **Price LC238 71.40 Price LC288 74.40 Price LC268 74.40**

Special Purpose Cutting Torches and Accessories for Cutting



(1) Cutting Torch Carriage is used in making long, straight cuts on steel sheets or plates. It is particularly effective when Smith's Step Type cutting tip is used in the torch or cutting assembly. Has 2¼" wheels with machined rims to follow smoothly along a straight edge. Wheels also have 5/32" flat groove around the circumference in case a track is used in place of a straight edge. This carriage will fit Smith's Lifelong and Lifetime cutting assemblies, Lifetime and Thrift cutting torches. Weight 1½ lbs.

NE134 Cutting torch carriage **7.85**

(2) Circle Cutting Attachment is designed for use with all Smith's Cutting torches and cutting assemblies except the Airline, Midline, Aircraft and Autocraft cutting assemblies. It has horizontal and vertical adjustments and can be used to make circular cuts up to 3 ft., 8½ inches in diameter. Position of guide wheel may be changed so that cuts can be made up to the edge of a plate. Weight 2 lbs., 2 oz.

NE148 Circle cutting attachment, **$ 7.85**

(3) Straight Head (180°) Cutting Torches are especially useful on jobs like cutting flues out of boilers or similar work in confined places where an angle head torch could not be used. The torch head is 1¼" at its major diameter **59.30**

(4) Machine Type Cutting Torches These are special torches designed for use in most of the popular makes of automatic cutting machines. Available in two hose type, as illustrated, for average cutting and in the three hose type for cutting very heavy plates and bars. Gas inlets on the two hose type fit standard right and left hand ¼" hose connections. The three hose type requires a special ⅜" hose for the cutting oxygen jet, one ¼" hose for preheating oxygen and a ¼" hose for acetylene. Torches supplied with either ¼"x⅜"x32 or ¼"x¼"x24 pitch rack. Be sure to specify rack when ordering.

LC292 Two hose machine type, torch **66.55**
LC293 Three hose machine type, torch **84.70**

Special Long Cutting Tips



Available in lengths from 5" to 18" and can be used in Smith's Lifelong and Lifetime cutting assemblies, Lifetime and Thrift Cutting Torches. For particular use in straight head torches for getting into boiler flues and other hard-to-get-at places. When required, tips can be bent up to 90° provided the bend is not closer than 1½" from outer end. In ordering, give size of tip, length, bending instructions and serial number of torch in which tip is to be used.

LC2—6x 6 (6" length) $16.35
LC2—6x 9 (9" length) 24.50
LC2—6x12 (12" length) 32.65
LC2—6x18 (18" length) 49.00

Torches of special length can be made up to customer's specifications. Prices are subject to job costs and such equipment is not returnable.

"TYPE K" TWO STAGE PORTABLE Acetylene Generator

With a New, Easy to Read Carbide Gauge — Simplified Outlet Regulator and Other Distinctive Features.

In the new "Type K" Acetylene Generator Smith's engineers have again made important progress toward more efficient and economical production of Acetylene gas for welding and cutting. A new carbide gauge that's as easily read as the gasoline gauge on your car, takes all the guess work out of determining the amount of carbide remaining in the hopper. A calibrated dial is plainly visible through a gas tight window, so that at a glance you know exactly what portion of the carbide hopper capacity remains to be used.

Another mighty important new feature is an outlet regulator that removes all pressure fluctuations and delivers acetylene to the torch at perfectly controlled and uniform pressure.

Additional Money Saving Advantages

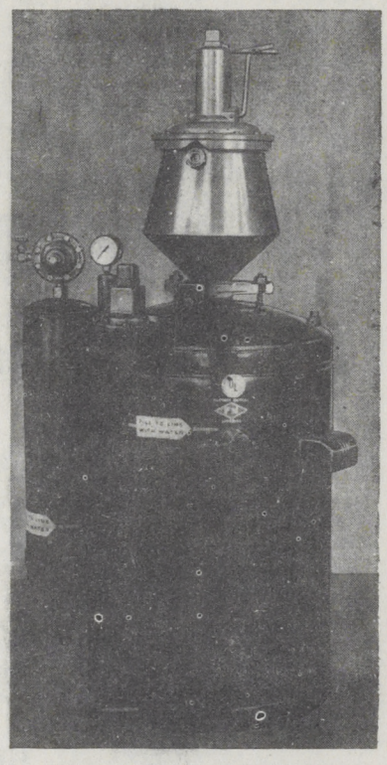
An automatic, non-mechanical air lift pump completely circulates all water in the generating chamber so that it is of uniform temperature throughout. It eliminates the "hot belt" at the waterline and actually reduces the operating temperature of the generator. It provides 50% greater distance between carbide feed and water level to eliminate the possibility of clogged feeding mechanism.

This combination of advantages produces double "scrubbed" gas that is cool and free of impurities. Maximum flame temperature is the result.

Safe, Efficient Two-Stage Design

Smith's Type K Generator is the carbide to water type. Carbide is held in the hopper and fed into the water below by a large diaphragm mechanism. Acetylene is generated under 13 lbs. pressure and delivered to the torch at a pressure of 11 lbs. The gas passes through the water circulator where it is amply washed and cooled. It then passes into the filter tank (which also serves as a hydraulic back pressure valve), through the outlet regulator and out into the hose. This is a two-stage generator in every sense of the word.

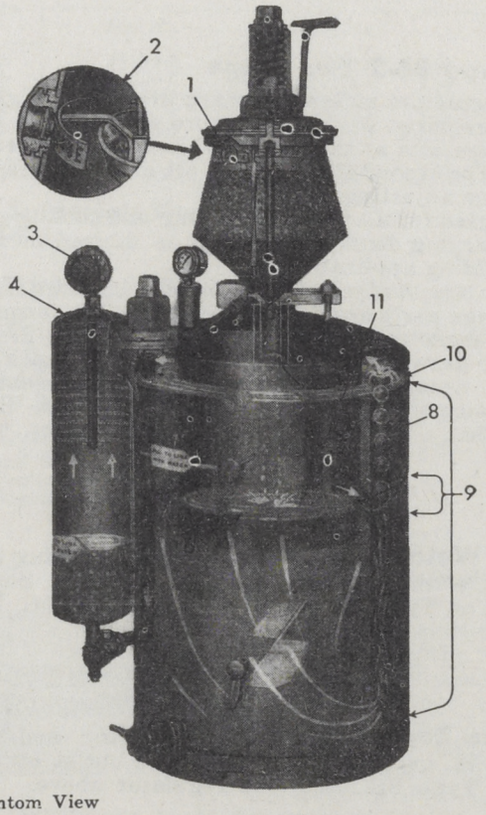
Complete safety is assured by the use of a combination filter tank and hydraulic back pressure valve, an efficient check valve between the filter tank and generating chamber, and an automatic safety relief valve. All three sizes are listed as approved for portable use by Underwriters' Laboratories, Inc., and Factory Mutual Laboratories, and may be operated at double rating as indicated on the name plate.



Made in 15, 30 and 50 lb. carbide capacity sizes. Maximum acetylene producing capacities are listed below.

SIZES, CAPACITIES, WEIGHTS AND PRICES

Use Size 14 N. D. Carbide Stock No.	Size	Diam. of Shell	Overall Height	Carbide Cap. Lbs.	Water Cap. Gals.	Max. Rated Capacity Per Hr. Cu. ft.	Net Weight Lbs.	Shipping Weight Lbs.	
K1615	15 lb.	18"	48"	15	17	30	155	195	$199.65
K1630	30 lb.	21"	58"	30	33	60	170	215	223.85
K1650	50 lb.	24"	67"	50	55	100	185	250	248.05



Phantom View

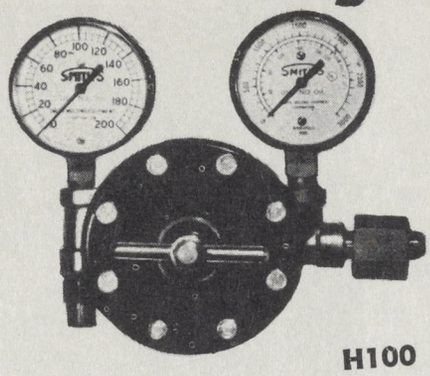
These Exclusive Features Result in More Efficient Acetylene Production.

The phantom view at the left shows how Smith's Type K Generator would look in operation if it were possible to see through the steel shell. You can readily see how important these operation features are to efficient, economical production of acetylene gas.

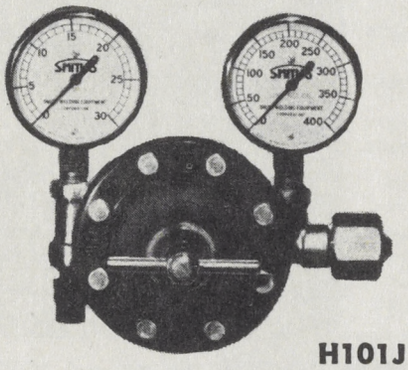
1. **New carbide gauge—as easy to read as the gasoline gauge on your car.**
2. **Carbide gauge in greater detail**
3. **Simplified outlet regulator which effectively controls flow of gas to torch.**
4. **Hydraulic filter tank where acetylene receives its second "scrubbing."**
5. **Water level when generator is not in operation.**
6. **Inner chamber water level (operating position).**
7. **Acetylene outlet from inner chamber to water circulator tube.**
8. **Water circulator tube incorporating "air lift" principle.**
9. **Increased radiation surface and elimination of "hot belt" at water level due to action of water circulator. First "scrubbing" of gas here**
10. **Outer chamber water level (operating position)**
11. **Fifty per cent greater distance between carbide feed and water level.**

A lever on the hopper locks the feeding mechanism so that the generator may be moved from job to job with perfect safety. For long hauls, the carbide hopper can be taken off without the necessity of removing the contents.

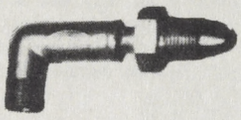
Smith's Regulators for Welding and Cutting

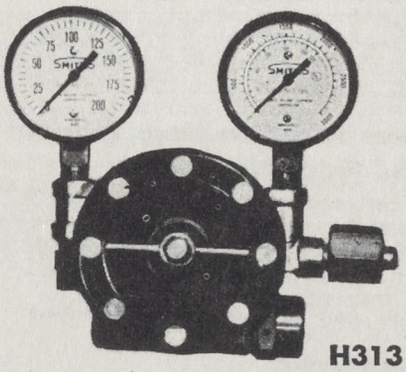


H100

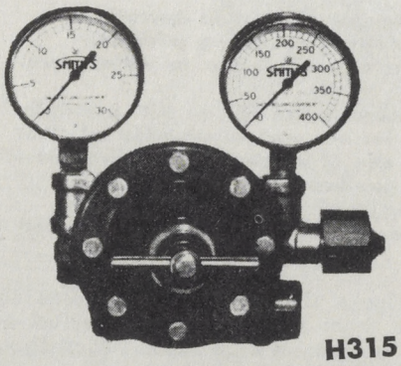


H101J

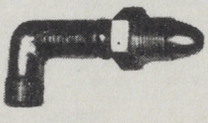




H313



H315



Smith's Type BB and Type BB-2 regulators are widely preferred for their accurate pressure control, trouble-free service and for the ease with which repairs can be made when necessary. The seat can be changed in 10 minutes, and the nozzle replacement requires but just a few more. Even a diaphragm replacement (which is a major repair on some makes) can be made in much less time than it takes to change a tire. Two extra seats (four seating surfaces) are furnished FREE with each new regulator in the adjusting screw cap.

Type BB-Single Stage

Designed for general welding and cutting. Body is forged brass for strength without excessive weight. Bonnet is made of heavy gauge metal by a special drawing process. Baked on finish protects both inside and outside surfaces. Oxygen regulators have green bonnet and acetylene regulators red bonnet.

Seat has two useable surfaces and is held in ball bearing guide for frictionless movement and proper alignment with nozzle. Nozzle is made of wear resistant metal and provided with fine mesh screens which keep out foreign materials and diffuse the sudden surge of pressure when a full tank is opened too fast. Diaphragms are made of reinforced, vulcanized fabric—sensitive, durable and easy to replace.

Oxygen regulators have spring loaded safety relief valve which automatically releases any excess pressure which might be built up accidentally within the regulator.

H100—BB Oxygen Welding Regulator. Handles all types of welding and medium cutting. Equipped with 2½" 200 lb. and 3,000 lb. gauges. Inlet fits standard oxygen cylinder valves. Outlet has 9/16"-18 right hand male thread which fits the nut on R11 and R13 hose connections. Weight: With gauges 5¼ lbs. **$33.30**

H101J—BB Acetylene Regulator. For all welding and cutting. May also be used with natural gas in cylinders when it is used as a fuel gas in the place of acetylene. 2½" dia. 30 lb. and 400 lb. gauges. Inlet connection fits No. 4 and No. 5 Airco cylinder valves, but H59 adaptor is furnished for use on cylinders having female type of valve. Outlet has 9/16"-18 left hand male thread to fit nut on R12 and R14D hose connections. Weight: With gauges 5½ lbs. **30.25**

Type BB-2 Two Stage

Smith's Two Stage regulators soften the sharp drop from high cylinder pressure down to the required working pressure and smooths out the fluctuations. The first stage acts as the "cushion" and its pressure range is preset at the factory. The second stage can be set at the desired working pressure by turning the adjusting screw.

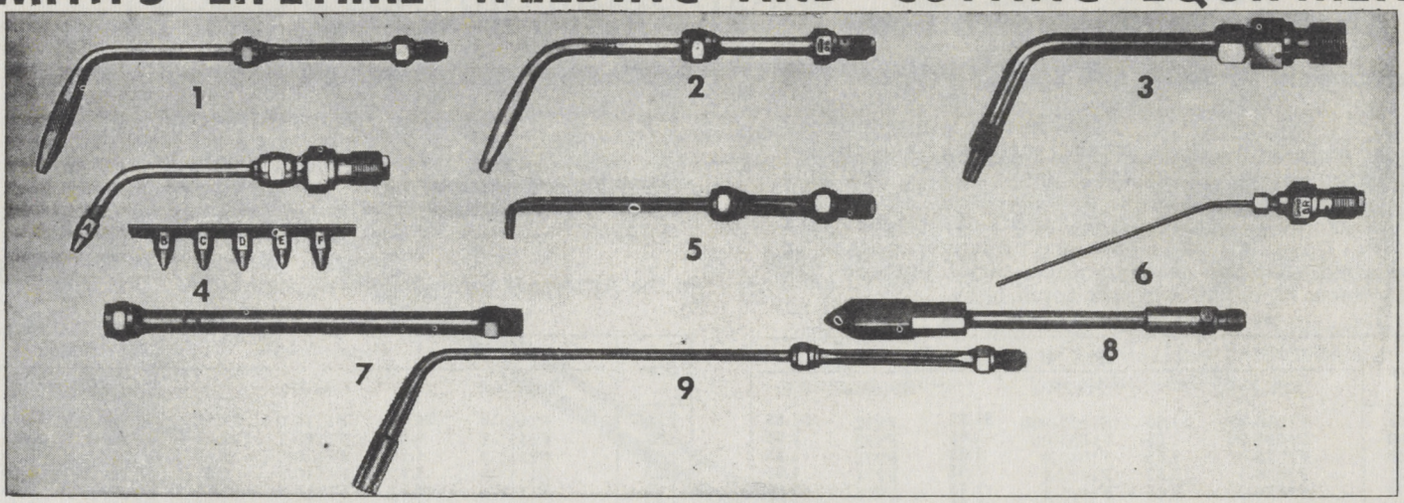
These regulators are used for all types of welding and cutting particularly when constant, unvarying flame adjustment is desired as in hard facing and many alloy welding applications.

Construction features are very similar to the single stage Type BB and many of the second stage parts are interchangeable. The forged brass body is only sufficiently larger to accommodate the necessary first stage mechanism. Heavy gauge drawn bonnet—reversible seats—sensitive diaphragms—wear resistant nozzles—frictionless ball bearing seat alignment—all are features common to both Type BB-2 and Type BB. All parts are easily replaceable.

H313—BB-2 Oxygen Welding Regulator. For all welding and medium heavy cutting. Has 2½" dia. 200 lb. and 3,000 lb. gauges. Same inlet and outlet connections as on Type BB oxygen regulators above. Weight: With gauges 6¾ lbs. **44.20**

H315—BB-2 Acetylene Regulator. For all welding and cutting. Has 2½" 30 lb. and 400 lb. gauges. Same inlet and outlet connections and inlet adaptor as on Type BB Acetylene regulator above. Weight: With gauges 7¼ lbs. **41.15**

SMITH'S LIFETIME WELDING AND CUTTING EQUIPMENT



Welding Tips and Special Purpose Tips for *Lifetime* Torch Body and *Thrift* Torch Body

(1) "60" and "70" Series Welding Tips

Size	Complete Tip		Copper Section with Nut		Brass Section with Nozzle	
	Stk. No.		Stk. No.		Stk. No.	
B60	F761	$6.40	F700	$3.20	F730	$3.20
B61	F762	6.40	F702	3.20	F732	3.20
B62	F764	6.40	F704	3.20	F734	3.20
B63	F766	6.40	F706	3.20	F736	3.20
B64	F768	6.40	F708	3.20	F738	3.20
B65	F770	6.40	F710	3.20	F740	3.20
B66	F772	6.40	F712	3.20	F742	3.20
B67	F774	6.40	F714	3.20	F744	3.20
B68	F776	6.40	F716	3.20	F746	3.20
B69	F778	6.40	F718	3.20	F748	3.20
B610	F780	7.25	F720	3.65	F750	3.65
B611	F782	7.25	F722	3.65	F752	3.65
B612	F784	7.25	F724	3.65	F754	3.65

Size	Complete Tip		Copper Section with Nut		Brass Section with Nozzle	
	Stk. No.		Stk. No.		Stk. No.	
70	F1091-0	$6.40	F1093-0	$3.20	F730	$3.20
71	F1091-1	6.40	F1093-1	3.20	F732	3.20
72	F1091-2	6.40	F1093-2	3.20	F734	3.20
73	F1091-3	6.40	F1093-3	3.20	F736	3.20
74	F1091-4	6.40	F1093-4	3.20	F738	3.20
75	F1091-5	6.40	F1093-5	3.20	F740	3.20
76	F1091-6	6.40	F1093-6	3.20	F742	3.20
77	F1091-7	6.40	F1093-7	3.20	F744	3.20
78	F1091-8	6.40	F1093-8	3.20	F746	3.20
79	F1091-9	6.40	F1093-9	3.20	F748	3.20
710	F1091-10	7.25	F1093-10	3.65	F750	3.65
711	F1091-11	7.25	F1093-11	3.65	F752	3.65
712	F1091-12	7.25	F1093-12	3.65	F754	3.65

(2) Pipe and Production Welding Tips.

Size	Complete Tip		Copper Section with Nut		Brass Section with Nozzle	
	Stk. No.		Stk. No.		Stk. No.	
D5	F1200-5	$6.40	F1201-5	3.20	F1202-5	3.20
D6	F1200-6	6.40	F1201-6	3.20	F1202-6	3.20
D7	F1200-7	6.40	F1201-7	3.20	F1202-7	3.20
D8	F1200-8	6.40	F1201-8	3.20	F1202-8	3.20
D9	F1200-9	6.40	F1201-9	3.20	F1202-9	3.20
D10	F1200-10	7.25	F1201-10	3.65	F1202-10	3.65
D11	F1200-11	7.25	F1201-11	3.65	F1202-11	3.65

(3) Soldering Tips. Nos. L227-1, L227-2, L227-3 and L227-4, $4.25
No. L227-5, 4.55

(4) F109—Lead Burning Assembly with 6 tip ends and holder, 6.41
LT101, LT102, LT103, LT104, LT105, LT106 tip ends (same as A, B, C, D, E and F tip ends), .37
LT109 tip end holder, .37
F66 Replacement Brass section 2.90
F18 Replacement Bent section .90

(5) Cylinder Welding Tips Nos. 64C, 65C, 66C, 67C and 68C, 7.25
Replacement Brass sections, 3.20
Replacement Copper sections, 4.05

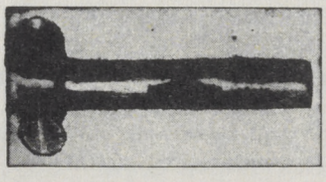
(6) F108 Radiator Tip, $4.25
F19C Replacement Bent section 1.05
F66A Replacement Brass section 3.20

(7) F396 Welding Tip Extension, 9" long, 4.25

(8) L93-0 Soldering Assembly with bit, 8.50
LT302 Replacement 1 lb. bit (same as L100), 4.25

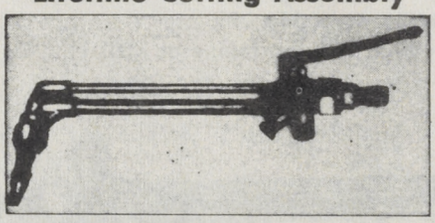
(9) F270 Heating Tip. Consumes oxygen and acetylene gases and provides a large volume of fast, concentrated heat. Tip end has 9 holes, one in the center and eight around the circumference.
F270 Heating Tip, complete, 15 73
F270-1 Copper Bent section, 12.10
F756 Brass section, 3.65

F7G ***Lifetime* Welding Torch Body**



Even though the Lifetime Welding Torch Body is now a discontinued item (having been replaced by the Lifelong Torch Body), it is still obtainable as a replacement item. Lifetime torches and combination Outfits are no longer catalogued or stocked. 24.20

G450B ***Lifetime* Cutting Assembly**



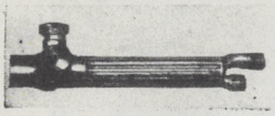
Smith's Lifetime Guarantee Cutting Assembly is another discontinued item as it has been replaced in the line by a New Lifelong Guarantee Cutting Assembly. However, it is still available as a replacement item. It uses the same cutting tips as are recommended for use in the Lifelong Cutting Assembly and has the same range. 29.20

This cutting assembly is available with either 80° or 90° angle head and can be used only with the Lifetime torch body listed on this page or the Thrift-Torch body
Use wrench No. N230

SMITH AIRCRAFT and AUTOCRAFT CUTTING EQUIPMENT

Aircraft Welding Torch Body

Replacement Welding and Special Purpose Tips



This is now a discontinued torch (replaced by Airline—torch body is still available as a replacement item. Aircraft outfits and torches with tips are no longer stocked or catalogued. All the welding and special purpose tips listed below fit in the Aircraft torch body.

WELDING TIPS Nos. A18 to A210

Size	Complete Tip		Copper Section		Brass Section	
	Stk. No.		Stk. No.		Stk. No.	
A18	F1056-000	$3.65	F1057-000	$1.85	F972	$1.85
A19	F1056-00	3.65	F1057-00	1.85	F972	1.85
A20	F1056-0	3.65	F1057-0	1.85	F972	1.85
A21	F1056-1	3.65	F1057-1	1.85	F974	1.85
A22	F1056-2	3.65	F1057-2	1.85	F976	1.85
A23	F1056-3	3.65	F1057-3	1.85	F978	1.85
A24	F1056-4	3.65	F1057-4	1.85	F980	1.85
A25	F1056-5	3.65	F1057-5	1.85	F982	1.85
A26	F1056-6	3.65	F1057-6	1.85	F984	1.85
A27	F1056-7	3.65	F1057-7	1.85	F986	1.85
A28	F1056-8	3.65	F1057-8	1.85	F987	1.85
A29	F1056-9	3.65	F1057-9	1.85	F989	1.85
A210	F1056-10	3.65	F1057-10	1.85	F991	1.85

WELDING TIPS Nos. V20 to V210

Size	Complete Tip		Copper Section		Brass Section	
	Stk. No.		Stk. No.		Stk. No.	
....	.....		.....		.....	
V20	F1235-0	$3.65	F1236-0	$1.85	F972	$1.85
V21	F1235-1	3.65	F1236-1	1.85	F974	1.85
V22	F1235-2	3.65	F1236-2	1.85	F976	1.85
V23	F1235-3	3.65	F1236-3	1.85	F978	1.85
V24	F1235-4	3.65	F1236-4	1.85	F980	1.85
V25	F1235-5	3.65	F1236-5	1.85	F982	1.85
V26	F1235-6	3.65	F1236-6	1.85	F984	1.85
V27	F1235-7	3.65	F1236-7	1.85	F986	1.85
V28	F1235-8	3.65	F1236-8	1.85	F987	1.85
V29	F1235-9	3.65	F1236-9	1.85	F989	1.85
V210	F1235-10	3.65	F1236-10	1.85	F991	1.85

Special Purpose Tips

Four special purpose tips for use in the Aircraft torch body are listed below.

(3) L229-4 Soldering tip, $ 3.40

(4) F1000 Lead Burning Assembly with 6 tip ends and holder, 5.45

Tip ends Nos. LT101, LT102, LT103, LT104, LT105, LT106 (same as A, B, C, D, E, F tip ends) .35 Each

LT109 Tip end holder, .35

F66 Replacement brass section, 1.85

F18 Replacement bent section, 1.10

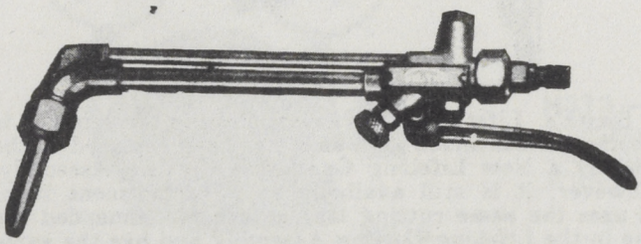
(6) F1022 Radiator tip, 2.85

F972 Replacement brass section 1.85

F19D Replacement tip end 1.05

(8) L207 Soldering Assembly with bit, 7.25

AT302 Replacement 1 lb. bit (same as L207-1), 3.65

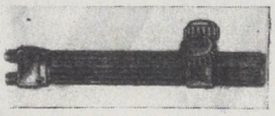


Aircraft Cutting Assembly

This assembly has been replaced by the new Airline cutting assembly but it is still available as a replacement item. Has 80° angle head. 28.00

Autocraft Welding Torch Body

Replacement Welding and Special Purpose Tips



Autocraft torches have been replaced by the new Midline torches

Autocraft torch body is still available as a replacement item. The welding and special purpose tips for use in the Autocraft torch body are listed below.

WELDING TIPS Nos. L80 to L812

Size	Complete Tip		Copper Section		Brass Section	
	Stk. No.		Stk. No.		Stk. No.	
L80	F1111-0	$4.85	F1110-0	$2.45	F1109-0	$2.45
L81	F1111-1	4.85	F1110-1	2.45	F1109-1	2.45
L82	F1111-2	4.85	F1110-2	2.45	F1109-2	2.45
L83	F1111-3	4.85	F1110-3	2.45	F1109-3	2.45
L84	F1111-4	4.85	F1110-4	2.45	F1109-4	2.45
L85	F1111-5	4.85	F1110-5	2.45	F1109-5	2.45
L86	F1111-6	4.85	F1110-6	2.45	F1109-6	2.45
L87	F1111-7	4.85	F1110-7	2.45	F1109-7	2.45
L88	F1111-8	4.85	F1110-8	2.45	F1109-8	2.45
L89	F1111-9	4.85	F1110-9	2.45	F1109-9	2.45
L810	F1111-10	5.45	F1110-10	2.75	F1109-10	2.75
L811	F1111-11	5.45	F1110-11	2.75	F1109-11	2.75
L812	F1111-12	5.45	F1110-12	2.75	F1109-12	2.75

Special Purpose Tips

Four special purpose tips for use in Autocraft torch body are listed below.

(3) L228-4 Soldering tip, each ..... $ 4.25

(4) F1248 Lead Burning Assembly with 6 tip ends and holder, 6.40

Tip ends Nos. LT101, LT102, LT103, LT104, LT105, LT106 (same as A, B, C, D, E, F), .35

LT109 Tip end holder, .35

F66 Replacement brass section, 2.80

F18 Replacement bent section, 1.10

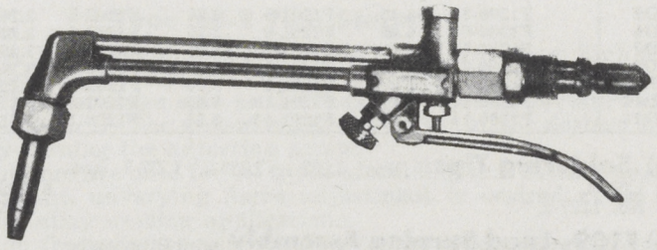
(6) F1112 Radiator tip, 3.80

F1096-13 Replacement brass section, 2.80

F19C Replacement tip end 1.05

(8) L300 Soldering Assembly with bit, 7.25

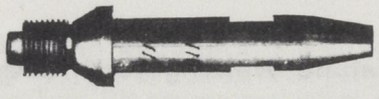
AT302 Replacement 1 lb. bit (same as L207-1), 3.61



Autocraft Cutting Assembly

This assembly is still available as a replacement item even though it has been replaced by the new Midline cutting assembly Has 80° angle head 28.00

Tips for Aircraft and Autocraft Cutting Assemblies



Standard 4-hole cutting tips made in sizes 201-4, 202-4, 203-4 and 204-4.

G585 Cutting tips (specify size), 4.55

G555 Step Type cutting tip for cutting light metal up to 14 gauge, each 6.05

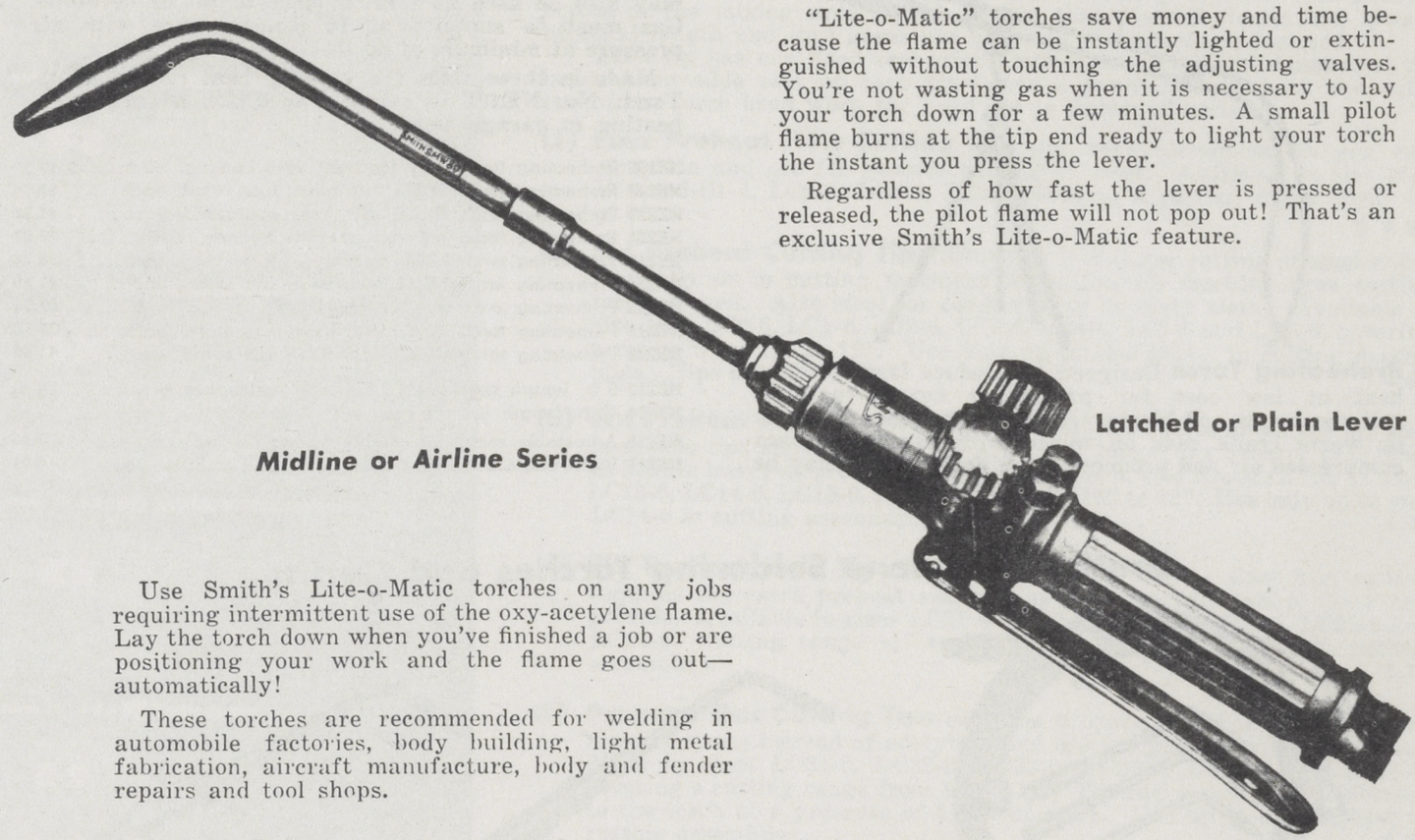
G556 Step Type cutting tip for cutting light metal up to 1/8" 6.05

G563 Rivet cutting tip, each 6.05

SMITH'S *New* Lite-o-Matic Welding Torches

Press a lever---the flame lights! Release---it's out!

Torches designed to pay for themselves out of gases and time saved.



Midline or Airline Series

Latched or Plain Lever

"Lite-o-Matic" torches save money and time because the flame can be instantly lighted or extinguished without touching the adjusting valves. You're not wasting gas when it is necessary to lay your torch down for a few minutes. A small pilot flame burns at the tip end ready to light your torch the instant you press the lever.

Regardless of how fast the lever is pressed or released, the pilot flame will not pop out! That's an exclusive Smith's Lite-o-Matic feature.

Use Smith's Lite-o-Matic torches on any jobs requiring intermittent use of the oxy-acetylene flame. Lay the torch down when you've finished a job or are positioning your work and the flame goes out—automatically!

These torches are recommended for welding in automobile factories, body building, light metal fabrication, aircraft manufacture, body and fender repairs and tool shops.

Smith's Lite-o-Matic torches save time and gas when it is necessary to light and shut off the torch frequently. Once the flame has been lighted and properly adjusted, it can be shut off and relighted as often as necessary without touching the adjusting valves.

An acetylene reservoir keeps the pilot flame from popping out no matter how suddenly the lever is pressed or released.

The lever valves are located on the inlet side of the adjusting valves so the welding flame always remains as set by the operator. No need to constantly readjust flame to compensate for changes in lever valve action.

Available in the Midline and Airline series with either latched or plain lever. The latched lever holds the lever actuated valves open until the operator releases it.

These torches use the standard welding tips made for use in regular Midline and Airline torch bodies. The Midline or Airline cutting assemblies may be used in the respective Lite-o-Matic torch bodies when equipped with the latched lever.

Specifications

Midline Lite-o-Matics

MW2—Midline Lite-o-Matic Torch Body only. With latched lever **Price $29.00**

MW3—Midline Lite-o-Matic Torch Body only. With plain lever. **Price $29.00**

MS121—Torch set. Consists of: MW2 Torch Body, one each MW801, MW803, MW805, MW807 and MW809 Welding Tips, tip cleaners and MW12 torch bag. **Price 59.50**

MS122—Torch set. Same as MS121 but with MW3 Torch Body in place of MW2. **Price 59.50**

Any desired assortment of welding tips can be furnished with the Lite-O-Matic torch body.
Unless otherwise specified, torch body MW2 or torch set MS121 will be shipped.

Airline Lite-o-Matics

AW2—Airline Lite-o-Matic Torch Body only. With latched lever. **Price 25.40**

AW3—Airline Lite-o-Matic Torch Body only. With plain lever. **Price 25.40**

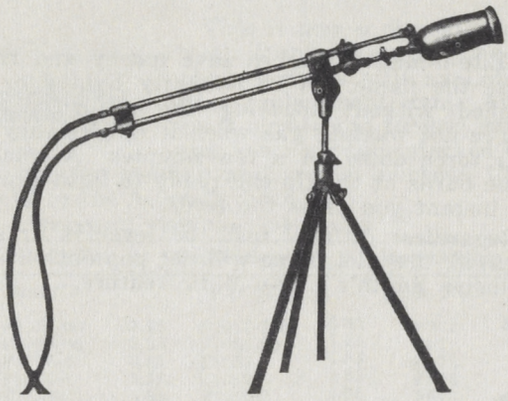
AS121—Torch set. Consists of: AW2 Torch Body, one each AW21, AW23, AW25, AW27 and AW29 Welding Tips, tip cleaners and AW12 torch bag. **Price 47.80**

AS122—Torch Set. Same as AS121 but with AW3 Torch Body in place of AW2. **Price 47.80**

Any desired assortment of welding tips can be furnished with the Lite-O-Matic torch body.
Unless otherwise specified, torch body AW2 or torch set AS121 will be shipped.

SMITH'S SPECIAL USAGE TORCHES

Preheating Torch for Volume Heating at Low Cost



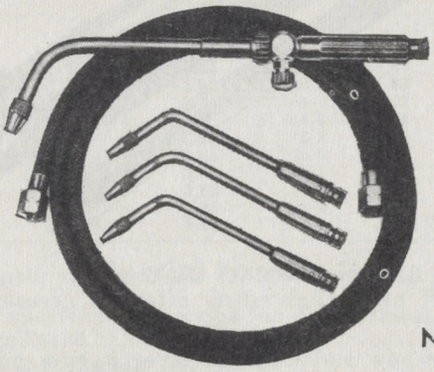
Preheating Torch Designed to produce large volume heat at low cost for preheating heavy castings, cylinder heads and blocks. It burns kerosene, distillate or waste crank case oil mixed with kerosene. Uses compressed air and produces a hot flame which may be varied from a few inches in length to several feet.

Petroleum by-product gases (natural or bottle gas) may also be used as fuel in place of oil or kerosene. Gas must be supplied at 15 lbs. pressure with air pressure at minimum of 80 lbs.

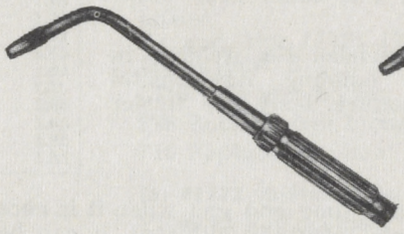
Made in three sizes for varying heat requirements. Torch No. NE201 is recommended for average preheating in garage work.

NE200	Preheating torch only for light duty heating, each	$ 27.23
NE210	Preheating torch NE200 with hose, less stand, each	33.70
NE220	Preheating torch NE200 with hose and stand, each	41.80
NE201	Preheating torch only for average heating, each	27.23
NE211	Preheating torch NE201 with hose, less stand, each	133.70
NE221	Preheating torch NE201 with hose and stand, each	41.80
NE202	Preheating torch only for heavy heating, each	27.23
NE212	Preheating torch NE202 with hose, less stand, each	33.70
NE222	Preheating torch NE202 with hose and stand, each	41.80
NE213	6 ft. length special oil hose with connection, each	2.40
NE214	12 ft. length 1/4" air hose with 2 connections, each	4.05
NE215	Adjustable stand for all preheating torches, each	8.15
NE216	Right angle bowl for NE200 and NE201 torches, each	4.25

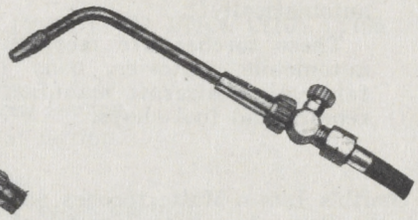
Smith's Acetylene Soldering Torches and Outfits



NE168



NE170



NE190

These are new acetylene soldering torches which operate on the injector principle and burn acetylene in combination with air. Four sizes of tips provide a complete range of heat for soldering copper pipe and fittings; radiator and battery repairs and other types of soldering, light brazing and heating.

Tips slip into head of torch body—changed in an instant. No wrench is needed for a gas tight seat. Tip nut holds tip in place but flexible seal rings prevent leakage of acetylene. Tips use Airline seal rings No. F640-4. One tip nut is supplied with each acetylene soldering kit and is changed with the tip. Tip nut is also supplied with individual torch bodies.

The soldering tip flames have a wide range of adjustment when tips are used in torch bodies Nos. NE160 and NE190.

NE160 and NE190 Torch bodies have needle valve for controlling flow of gas and for flame adjustment. Should be used only when gas is supplied through a regulator.

NE170 Torch body does not have needle valve and may be used with hose attached directly to outlet of Prest-O-Lite cylinder. Hose No. RL115 permits direct connection to "B" size cylinder.

Complete outfits are furnished with torch body, four tips and 6 ft. of 3/16" acetylene hose with proper connections.

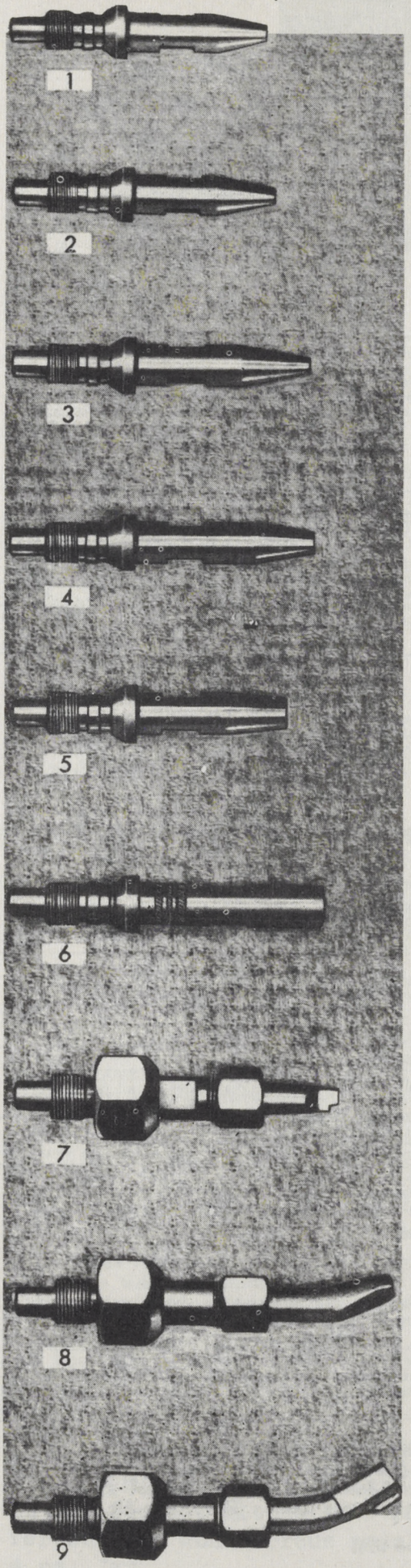
Torch With Needle Valve

NE160	Torch Body only with needle valve and tip nut, each	$ 5.65
NE167	Torch Body NE160 with 4 tips (less hose), each	15.60
NE168	Acetylene Soldering Outfit consisting of: NE167 Torch with RL111 hose, each	17.60
NE161, NE162, NE163	Soldering Tips, each	2.40
NE164	Soldering Tip, each	2.75
NE190	Torch Body only (needle valve and torch head without handle tube). Makes an inexpensive soldering torch when used with any of the tips listed above (includes tip nut), each	2.75

Torch Without Needle Valve

NE170	Torch Body only without needle valve (with tip nut), each	12.70
NE177	Torch Body NE170 with 4 tips (less hose), each	14.75
NE178	Acetylene Soldering Outfit consisting of: NE177 with RL111 hose (for use with regulator), ea.	14.75
NE179	Acetylene Soldering Outfit consisting of: NE177 torch and RL115 hose, each	2.05
RL111	6 ft. 3/16" acetylene hose with R14D connections both ends. Used in NE168 and NE178 Outfits	2.89
RL115	6 ft. 3/16" acetylene hose with R14D and L47 connections. Used in NE179 Outfit	.06
F640-4	Seal rings for NE161, NE162, NE163, NE164, NE165 Tips, each	.60
L600-3	Tip nut, each	

CUTTING TIPS for LIFELONG and Lifetime Cutting Assemblies, Lifetime and Thrift Cutting Torches



Because of patented construction features, Smith's cutting tips are most economical in gas consumption. They are swaged of hard-drawn copper by a special process assuring clean, unobstructed gas passages. Lower gas consumption and greatly reduced cost per cut is the direct result.

Preheating flames converge toward the center cutting jet so that a smaller area is heated, resulting in faster starting of cuts. The annular orifice in the mixing area makes certain that preheat flames are always of equal length and that gases are properly and thoroughly mixed.

Each tip has one fixed seat which makes contact in the bottom of the head. A movable seat on each tip forms a gas-tight seal with the outer end of the torch head when the head nut is tightened securely.

(1) Four Preheat Hole Cutting Tips are very economical in gas consumption and are for general cutting of steel. Available in size Nos. LC0-4, LC1-4, LC2-4, LC3-4, LC4-4 covering a cutting range from $\frac{3}{32}$" to 4". **$ 4.85**

(2) Six Preheat Cutting Tips (Short). For faster cutting of steel either manually or in cutting machines when Smith's machine type cutting torch is used. Also ideal for cutting dirty or rusty metal. Available in size Nos. LC0-6, LC1-6, LC2-6, LC3-6, LC4-6, LC5-6 and LC6-6, covering a range from $\frac{3}{32}$" to 12". Use only up to size LC4-6 in cutting assemblies. Tips are 3 5/8" long. **4.85**

(3) Six Preheat Hole Cutting Tips (Long) are the same as the six preheat hole tips above except they are 7/16" longer for greater resistance to heat in heavy or prolonged cutting. Made in size Nos. LC11-6, LC12-6, LC13-6, LC14-6, LC15-6, LC16-6. Range 3/16" to 12". Use only up to size LC14-6 in cutting assembly. **5.15**

(4) Six Preheat Hole Tips for Cutting Cast Iron. Cast iron cutting requires the extra preheat and cutting jet capacities which these tips provide. Available in sizes LC21-6, LC22-6, LC23-6, LC24-6, LC25-6 and LC26-6. Cutting range ½" to 10". Use only up to LC23-6 in cutting assemblies. **5.15**

(5) Propane Gas Cutting Tips consume propane or other petroleum derivative gases instead of acetylene and are for general cutting of steel. Made in sizes LC31-0, LC32-0, LC33-0, LC34-0, LC35-0 and LC36-0, covering a cutting range from ⅛" to 12". The fuel gas must be delivered to the torch at a pressure of 5 lbs. or more. Use up to size LC34-0 in cutting assemblies. **4.84**

(6) LC66-0 Scarfing and Rivet Burning Tip used for removal of rivets, and areas from steel castings or billets containing defects, cracks or imperfections. The cutting oxygen stream expands within the tip and leaves it at relatively low velocity, giving it the "washing" effect necessary for this type of work. Made in one size only, No. LC66-0. Not recommended for use in cutting assemblies. **6.05**

(7) Step Type Tips for Cutting Light Gauge Metal are made in two sizes: No. LC61-0 for cutting 24-ga. to 14-ga. steel and No. LC62-0 for cutting 18-ga. to ⅛" steel. Especially designed to make clean, smooth cuts in light gauge metal, with a narrow kerf, at high speeds. **6.05**

LC61-1 replacement tip end and nut for LC61-0, **3.05**
LC62-1 replacement tip end and nut for LC62-0, **3.05**

(8) Rivet Cutting Tips are designed to burn the heads off rivets flush with the plate. Particularly useful in boiler repair or remodeling because the rivet head can be quickly removed without injury to the plates. Made in size No. LC51-0 for up to ½" and No. LC52-0 for up to ¾" rivets. **6.05**

LC51-1 replacement tip end and nut for LC51-0, **3.05**
LC52-1 replacement tip end and nut for LC52-0, **3.05**

(9) Gouging Tips used for removal of old welds, veeing out preparatory to welding, groove cutting and gouging of all kinds. Made in three sizes: No. LC41-0 for ⅛" to ¼" gouge depths, No. LC42-0 for ¼" to ⅜" gouge depths and LC43-0 for $\frac{3}{16}$" to $\frac{7}{16}$" gouge depths. Use only No. LC41-0 in cutting assemblies. Hard alloy insert at end of tip resists wear where tip end contacts bottom of groove. **13.30**

10.30

LC41-1 replacement tip end and nut for LC41-0, **10.30**
LC42-1 replacement tip end and nut for LC42-0, **10.30**
LC43-1 replacement tip end and nut for LC43-0, **10.30**

Replacement Parts for Gouging, Rivet Cutting and Step Type Tips

LC41-2 Mixing section for LC41-0, LC51-0, LC52-0, LC61-0, LC62-0. **2.40**
LC42-2 Mixing section for LC42-0, LC43-0, LC51-0, LC52-0. **2.40**
G71A Head Nut for rivet cutting gouging and step type tips. **.60**

SMITH WELDING HOSE



"TWIN-TWIST" — A NEW Two Line Hose with the Flexibility of a Single Line

Smith's "Twin-Twist" is a completely new idea in two-line hose. Two lines of standard single hose are ingeniously spiralled into a very flexible "Twin-Twist" type and each line is free to bend and flex independently of the other because they are not cemented or moulded together. This gives "Twin Twist" a flexibility that is not found in ordinary two-line hose.

In case of damage, the two lines can be separated for repairing and easily rejoined after the repair is made.

"Twin-Twist" hose is made of tough, high quality rubber reinforced with heavy braid fabric. Available in 3/16" and 1/4" I.D. Oxygen hose is green. Acetylene hose is red. Cut lengths with connections are listed below.

"TWIN-TWIST" Hose — Cut Lengths with Connections

In the listing below, numbers prefixed with the letters "RA" cover 3/16" I.D. hose for use with Airline, Midline and other torches having 3/8"-24 thread connections. Numbers prefixed with letters "RL" cover 3/16" or 1/4" I.D. hoses for use with Lifelong, Lifetime and Thrift torches or others having 9/16"-18 thread connections.

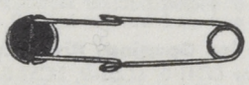
Stock No.	Length	Inside Diam.	Type	Connections	Fit	
RA311	6 ft.	3/16"	Twin-Twist	R13, R14, R13D, R14D	R13D & R14D connections fit outlets on oxygen and acetylene regulators. R13 & R14 connections fit inlets on all Midline and Airline torch bodies, lead burning torches, F928 & F1225.	$ 4.05
RA321	12½ ft.	3/16"	Twin-Twist	R13, R14, R13D, R14D		6.90
RA331	25 ft.	3/16"	Twin-Twist	R13, R14, R13D, R14D		12.35
RL322	12½ ft.	3/16"	Twin-Twist	R13D & 14D both ends	Oxygen and acetylene regulator outlets and inlets on all large torches.	6.90
RL331	25 ft.	3/16"	Twin-Twist	R13D & 14D both ends		12.35
RL721	12½ ft.	1/4"	Twin-Twist	R11 & R12 both ends	Oxygen & acetylene regulator outlets and inlets on all large torches.	8.10
RL731	25 ft.	1/4"	Twin-Twist	R11 & R12 both ends		14.75

Standard Single Line Hose

Smith's standard single line hose is moulded of high quality rubber reinforced with braided fabric to make it tough, strong and flexible. Available in 3/16" and 1/4" I.D. for all welding uses and medium cutting. A specially constructed 1/4" I.D. oxygen hose is also available for use with the high oxygen pressures encountered in heavy cutting. Oxygen hose is green. Acetylene hose is red.

Stock No.	Length	Inside Diam.	Type	Connections	Fit	
RA111	6 ft.	3/16"	Acetylene	R14, R14D	Acetylene regulator one end. Torch Nos. AW1, AW2, AW3, MW1, MW2, MW3, F928, F1225, NE140, NE150 other end.	2.05
RA121	12½ ft.	3/16"	Acetylene	R14, R14D		3.45
RA131	25 ft.	3/16"	Acetylene	R14, R14D		6.20
RA211	6 ft.	3/16"	Oxygen	R13, R13D	Oxygen regulator one end. Torch Nos. AW1, AW2, AW3, MW1, MW2, MW3, F928, F1225, NE120, NE140 other end.	2.05
RA221	12½ ft.	3/16"	Oxygen	R13, R13D		3.45
RA231	25 ft.	3/16"	Oxygen	R13, R13D		6.20
RL111	6 ft.	3/16"	Acetylene	R14D both ends	NE160, NE170, NE190, NE100, NE110 torches.	2.05
RL115	6 ft.	3/16"	Acetylene	R14D & L47	NE179 & NE108 outfits.	1.88
RL122	12½ ft.	3/16"	Acetylene	R14D both ends	Acetylene regulator outlet and acetylene inlet on all large torches.	3.45
RL131	25 ft.	3/16"	Acetylene	R14D both ends		6.20
RL222	12½ ft.	3/16"	Oxygen	R13D both ends	Oxygen regulator outlet and oxygen inlet on all large torches.	3.45
RL231	25 ft.	3/16"	Oxygen	R13D both ends		6.20
RL521	12½ ft.	1/4"	Acetylene	R12 both ends	Acetylene regulator outlet and acetylene inlet on all large torches.	4.05
RL531	25 ft.	1/4"	Acetylene	R12 both ends		7.40
RL541	50 ft.	1/4"	Acetylene	R12 both ends		14.08
RL551	100 ft.	1/4"	Acetylene	R12 both ends		24.95
RL621	12½ ft.	1/4"	Oxygen	R11 both ends	Oxygen regulator outlet and oxygen inlet on all large torches.	4.05
RL631	25 ft.	1/4"	Oxygen	R11 both ends		7.40
RL641	50 ft.	1/4"	Oxygen	R11 both ends		14.08
RL651	100 ft.	1/4"	Oxygen	R11 both ends		24.95
RL831	25 ft.	1/4"	Oxygen	R11 both ends	Oxygen regulator outlet and oxygen inlet on all Smith's cutting torches.	9.20
RL841	50 ft.	1/4"	Oxygen	R11 both ends		17.70
RL851	100 ft.	1/4"	Oxygen	R11 both ends		32.20

Smith's Torch Lighter



A dependable lighter that saves time and gas. The large shield collects gas from the tip and assures instant lighting. Large, long-lasting flint gives a hot spark for lighting any kind of gas flame. Revolving file will last for years.

N113 Lighter with one flint

N113-3 Extra flints

WELDING FLUXES



1



2



3



4

(1) A-MAL-GAM N1. Recommended for welding of cast iron with bronze rod when the temperature must be kept at a minimum. Particularly adapted to so-called "cold" brazing when the piece is not preheated. It tins easily at low heat and forms a perfect bond between the bronze and cast iron. May also be used for fusion welding of cast iron.

This is a black flux packed in one pound moisture proof dark blue can. Instructions for use packed in each can. **$1.80**

(2) A-MAL-GAM N2. The best flux you can buy for brazing cast iron with bronze rod. It makes a perfect bond between the two metals even though the cast iron is at the melting point. It is fast flowing, tins readily and leaves a clean, bright surface with no waste of flux. It is also used for brazing steel and malleable iron or joining two dissimilar metals.

With Smith's A-Mal-Gam N2, many jobs can be brazed without preheating, but preheating is recommended if the piece being welded is thin or subject to unequal stress due to varied thickness of surrounding parts.

A red flux packed in a bright red moisture proof, one pound container. Instructions packed in each can. **1.80**

(3) A-MAL-GAM N3. Smith's N3 A-Mal-Gam is an all-purpose flux for welding steel, malleable, copper and brass with bronze rod. Is also used for brazing galvanized iron, in which case it is mixed with water to form a paste and spread on the metal surface being brazed. It then acts as a protective coating in addition to the fluxing action.

A cream-colored flux in a bright yellow, moisture proof one pound can. Instructions for use packed in each can. **Price Per Can 1.10**

(4) Cast Iron Flux. A powerful, quick acting flux for fusion welding of cast iron parts with a cast iron rod. This flux dissolves the oxide and slag present in cast iron, and floats it to the surface of the puddle where it cannot cause hard spots or blow holes in the weld. When used according to directions, Smith's Cast Iron flux will produce close grained welds with good machining qualities—dependent, of course, upon the type of cast iron rod being used.

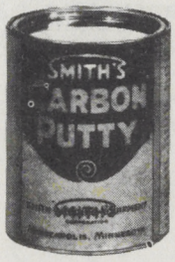
This is a dark red, granular flux in one pound or five pound moisture proof cans. Complete instructions packed in each can. **Price Per 1 lb. Can $ .75**



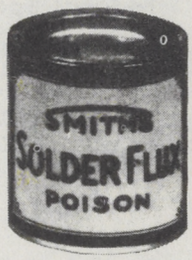
5



6



7



8

(5) Sheet Aluminum Flux. This is a special flux used for welding aluminum sheets with an aluminum rod. Also used for welding aluminum castings. It causes oxides or impurities to float to the surface where they can be easily removed. Excess flux is removed by scrubbing with hot water. Packed in ¼ lb. bottles and ½ lb. and one pound moisture proof cans. Instructions carried on bottle or can label. (1-lb. can illustrated.)
¼ lb. Bottle $ .90 ½ lb. Can 1.60 1 lb. Can 3.00

(6) Cast Aluminum Flux. For welding aluminum castings with cast aluminum rod or a drawn rod made of an alloy of 5% silicon and 95% aluminum. It acts as a cleanser, prevents formation of bubbles and breaks up oxide formation on weld surface.

Packed in 12 oz. moisture proof can with instructions for use shown on label. **12 oz. Can 1.50**

(7) Carbon Putty. This is a compound that no job shop can afford to be without. It has hundreds of uses in forming back up moulds for repairing castings and machined parts—retaining threads of bolt holes, lugs and corners—for lining up small, intricate pieces prior to welding and many others. Eliminates the need for carbon rods and blocks. Can be mixed with water to a thick paste and moulded to any desired shape. Packed in 5 lb. can. **$3.00**

(8) Soft Soldering Flux. A quick acting general purpose flux for use in all types of soft soldering work. It bites through oil, grease and surface oxides to help produce strong bonds. Packed in 8 oz. can—sufficient to make one quart of liquid flux when mixed with water. **.90**

WABASH SILVER SOLDER FLUX

A ready mixed paste, instant use. Brush in cap for use with silver solder, on all ferrous and non-ferrous metals or alloys. 4 oz. Jar. **1.25**

HANDY SILVER SOLDER FLUX

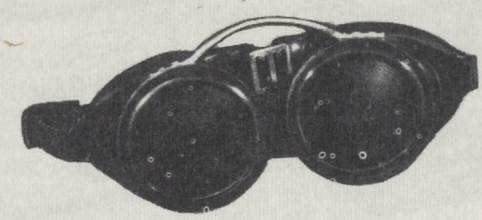
For use with silver solder, when joining copper brass--bronze nickel--monel steel-stainless steel and other ferrous and non ferrous metals. **¼ lb. $1.22 ½ lb. 2.20 1 oz. $ .55**

WELDING ACCESSORIES

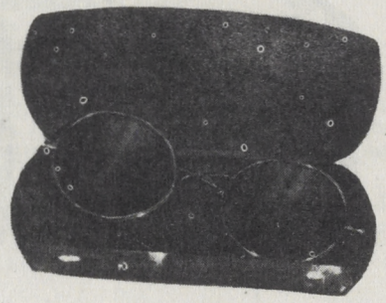
PROTECT YOUR EYES! Wear Goggles Whenever You Weld or Cut



N107



N109



N97

N107 Goggles

Here is a pair of goggles that give real eye protection at moderate cost. Fitted with 50MM Federal specification green lenses which filter out the harmful infra-red and ultra-violet rays of the oxy-acetylene flame. Colored lenses are protected by clear cover lenses. Eye cups are moulded of strong, light weight plastic with rounded edges to fit the contour of the face.

Adequate ventilation is assured by a series of vanes behind the lens, yet there is no danger of foreign particles, or unfiltered light entering the eyecup. Adjustable ball chain nose bridge allows instant adjustment. One piece, adjustable elastic head band.

Available in No. 5 (light), No. 6 (medium) or No. 8 (dark) shade lenses.

Specify shade when ordering. **Per Pair $3.40**

N97 Spectacles

These spectacles afford only minimum protection and should be used only for light brazing, lead burning, furnace observing, glass working. Not recommended for welding or cutting. Rust proof frames with non replaceable light shade lenses only. **Per Pair 1.70**

Federal Specification Lenses

No. 5 Shade For light oxy-acetylene welding and cutting
No. 6 Shade For medium oxy-acetylene welding
No. 8 Shade For heavy oxy-acetylene welding

N107-5 Light shade, N107-6 medium shade or N107-8 dark shade green lenses **Per Pair 1.50**

N109 Goggles

A fine pair of moulded plastic goggles especially designed for welders who must wear prescription spectacles while welding or cutting. These goggles offer complete eye protection and at the same time, protect the prescription lenses in your glasses from pitting and breakage. The 50MM Federal Specification green lenses filter out harmful light rays and are protected by clear cover lenses. Metal bridge across the nose piece makes it possible to raise or lower the goggles with one hand.

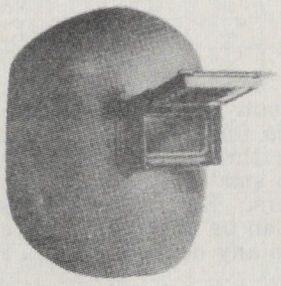
Shielded ventilation provides for adequate air flow and eliminates danger of foreign particles or unfiltered light rays from entering eye cups. Supplied with adjustable, one piece elastic head band. Available with lenses of the following shades: No. 5 (light), No. 6 (medium) or No. 8 (dark). Specify shade desired.

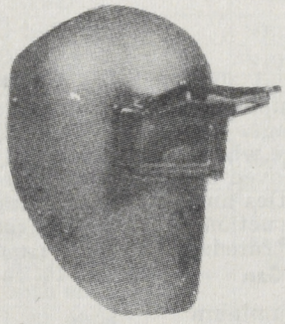
Per Pair 3.80

Clear Cover Lenses, 50MM

The N107 and N109 goggles listed on this page are equipped with plain clear lenses when shipped. After a certain amount of use, the clear lenses become pitted and should be replaced with one of the types listed below. The spatter proof type has 8 to 10 times the life of the plain type and thus are a better value.

N107-1 Plain clear lenses, **Per Pair .25**
N107-2 Spatter proof clear lenses, **Per Pair .60**
N107-3 Elastic headband **Each .42**







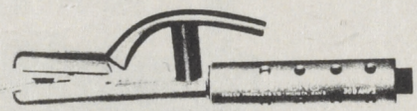
DASCO 1450-B HELMET . . . . Of one piece construction with lift front lens holder, which permits operator to observe his work, without lifting helmet. When lift front is in the raised position, protection is offered from flying slag particles. Equipped with # 4 headgear and sweatband, ensuring ease and comfort to the Welder.
Each 12.40

DASCO 1475-B HELMET . . . . Similiar to the above, except that face piece extends straight downwards. **Each 12.40**

DASCO S-1125 FACE SHIELD .. Is made from high quality cellulose acetate which is safe to wear owing to it's spark and heat resisting qualities. Comes in Shade 5 for welding, and clear for grinding purposes. **Each 3.00**

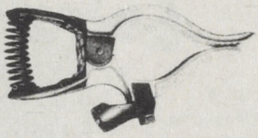
WELDERS' ACCESSORIES

"TWECOTONG" INSULATED HOLDERS



Feature simplicity of design and operation. Insulation is practically indestructible laminated glass cloth Bakelite. Covers are internally-keyed to high copper alloy holder casting. Fibre handle is ventilated; spring is insulated. Cool running, positive electrode grip, perfect balance.

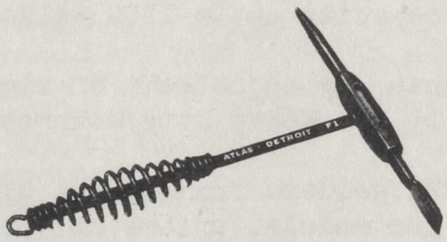
TWECO "REDHEAD" GROUND CLAMPS



TWECO "Redhead", the original arc welding Ground Clamp, provides a quick, positive and portable ground connection. Holders and cable connection, shunted jaws on Junior and Senior models. All models copper alloy.

Model	Length Ins.	Cap. Amps.	Jaw Op'g. Ins.	Cap. Cable
Midget 1.95 Ea.	4½	125	1	2
Junior 3.90 Ea.	8½	300	1½	1/0
Senior 5.85 Ea.	10	500	2	4/0

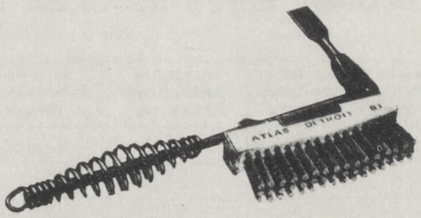
MODEL E-1
CHIPPING TOOL



This long life tool, with chisel and cone bit stresses economy due to the ability to replace bits after long hard service and repeated sharpening wears them down.
Length 9½ inches.

2.85 Each

MODEL B-1
CHIPPING TOOL

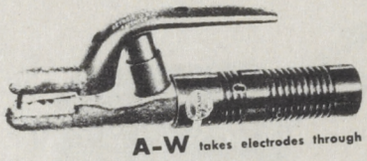


An ideal tool of rugged construction for chipping and brushing flux from welder. Permits easy reversing or removal of brush and easy changing of direction of chisel for specific jobs, either parrallel or right angles.

Length 10 inches.

3.20 Each

JACKSON A.W. FEATHERLIGHT HOLDERS

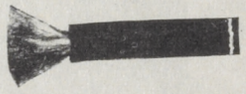


A-W takes electrodes through ¼"

The lightest fully insulated holder ever developed. It grips rods in any position, uses them to short stubs. All parts are replaceable. We carry a complete stock of Jackson Holders, for more detailed informed on these holders, please do not hesitate to write to us.

Price A1—$ 8.00
A58— 11.25
AW— 9.00

DASCO WELDING CABLE



DASCO Welding Cable is made of finely stranded copper wire for flexibility. Rubber outer covering is tough and wear resisting.
Comes in # 2, # 4, # 0 and 00 sizes.

	Under 50 Ft.	50-99	100-199	200 or Over
No. 2	52	50	48	42
No. 0	72	62	55	52
No. 00	85	75	68	63



DASCO Chrome Leather Cape is made of the best Chrome Leather and is designed for comfort, utility and appearance. Ideal for overhead welding, where protection to the shoulders and arms is essential.

8.85 Each



DASCO Chrome Leather Apron is constructed of the finest Chrome Leather . . . in great demand by Welders and for general use, because it combines working comfort with full protection. **6.85 Each**

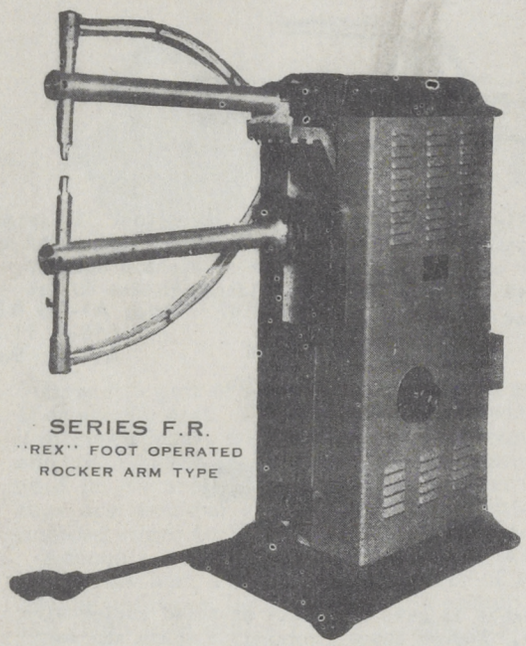


DASCO Welder's Gloves are made of the finest Chrome Leather, designed for comfort and durability. Re-inforced index finger and thumb. Welted seams for comfort and extra wear.

Per Pair $2.45
12 or More Pairs 2.35

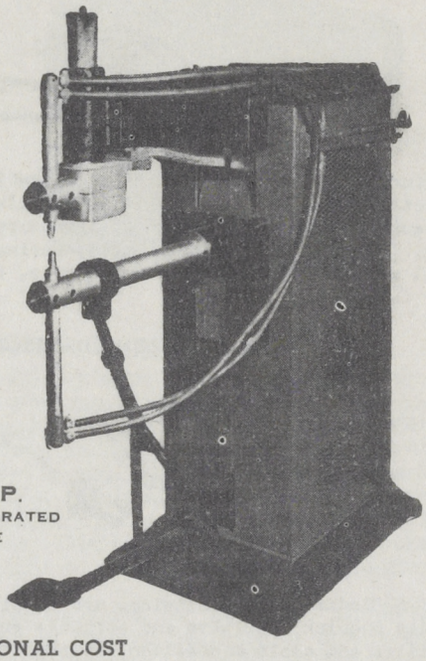
REX SPOT WELDERS–FOOT OPERATED

Adjustable Lower Arm, Swivel or Sliding Face Plate Mountings — Upper Horn Adjustable In and Out



SERIES F.R.
"REX" FOOT OPERATED
ROCKER ARM TYPE

Built in Capacities
from 2½ to 75
KVA



SERIES F.P.
"REX" FOOT OPERATED
PRESS TYPE

HORN LENGTHS OVER STANDARD FURNISHED AT ADDITIONAL COST

ON ROCKER ARM UNITS, both the upper and lower horns may be rotated and reversed in their sockets to provide a wide variety of Electrode arrangement. The Rex slide in or out feature of the upper horn permits welding points to reach otherwise inaccessible places on the work. Horns are drilled for electrode holding at either end. One end 90 degrees and the other 30 degrees.

PRESS TYPE, or VERTICAL, "REX" SPOT WELDERS are high production units designed for precise spot and light projection welding.

REX FOOT OPERATED SPOT WELDERS afford production capacity up to 1500 welds per hour. Welding capacity beyond rating at lower speed.

OPERATING STROKE adjustable from ¼ inch to 1¾ inches, by adjustment of electrodes. Variable positions of electrodes are compensated by the Heavy Duty Compression Spring mounted at the top of connection rod.

Lower Arm Braces are standard on all Press type REX Welders from 30 KVA up, and on Rocker Arm types from 50 KVA and up. For smaller models, prices on application.

IMPORTANT: High Speed Welding Contactors and Weld Timers are recommended for all REX Welders to insure uniform accurate control of weld time essential to best quality welding. REX Welders of 20 KVA and higher ratings are wired at the factory for connection to Contactors and Weld Timers. Prices on Contactors and Weld Timers are quoted extra.

Adjustable lower horn arrangements provide spacing between horns up to 15 inches.

*Transformers are Water Cooled.

SPECIFICATIONS

KVA	WELDING CAPACITIES 2 PIECES CLEAN FLAT STEEL	STANDARD THROAT DEPTH ROCKER	STANDARD THROAT DEPTH PRESS	HORN DIAMETER INCHES	ELECTRODE DIAMETER INCHES	NO. HEAT CONTROL POINTS	MAXIMUM PRESSURE POUNDS	SHIPPING WEIGHT CRATED
2½	24 ga. or lighter	12 inches	10 inches	1½	⅝	3	350	420 lbs.
5	22 " " "	12 "	10 "	1½	⅝	3	350	430 "
7½	20 " " "	16 "	10 "	1¾	⅝	4	350	450 "
10	18 " " "	18 "	23 "	2	⅞	4	500	850 "
15	16 " " "	18 "	23 "	2	⅞	6	500	900 "
20	14 " " "	18 "	23 "	2	⅞	6	500	900 "
30	12 " " "	20 "	24 "	2¼	1	6	750	1360 "
40	10 " " "	20 "	24 "	2¼	1	8	750	1425 "
*50	8 " " "	20 "	24 "	2½	1¼	8	1200	1455 "
*75	6 " " "	20 "	24 "	2½	1¼	8	1200	1680 "

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H. J. CROUDEN

PHONE 925 541